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From the Editor

The staff of *Military Review* has been working very hard to produce the magazine on schedule every month with quality articles that will stimulate the minds of our readers. Sometimes we are spectacularly successful and hit the moving target broadside. At other times, we have chased an elusive end, seeking the "right stuff" for our recurring themes on command, leadership, training, doctrine, operational art and technology. Always, we are dependent on those who write and submit articles.

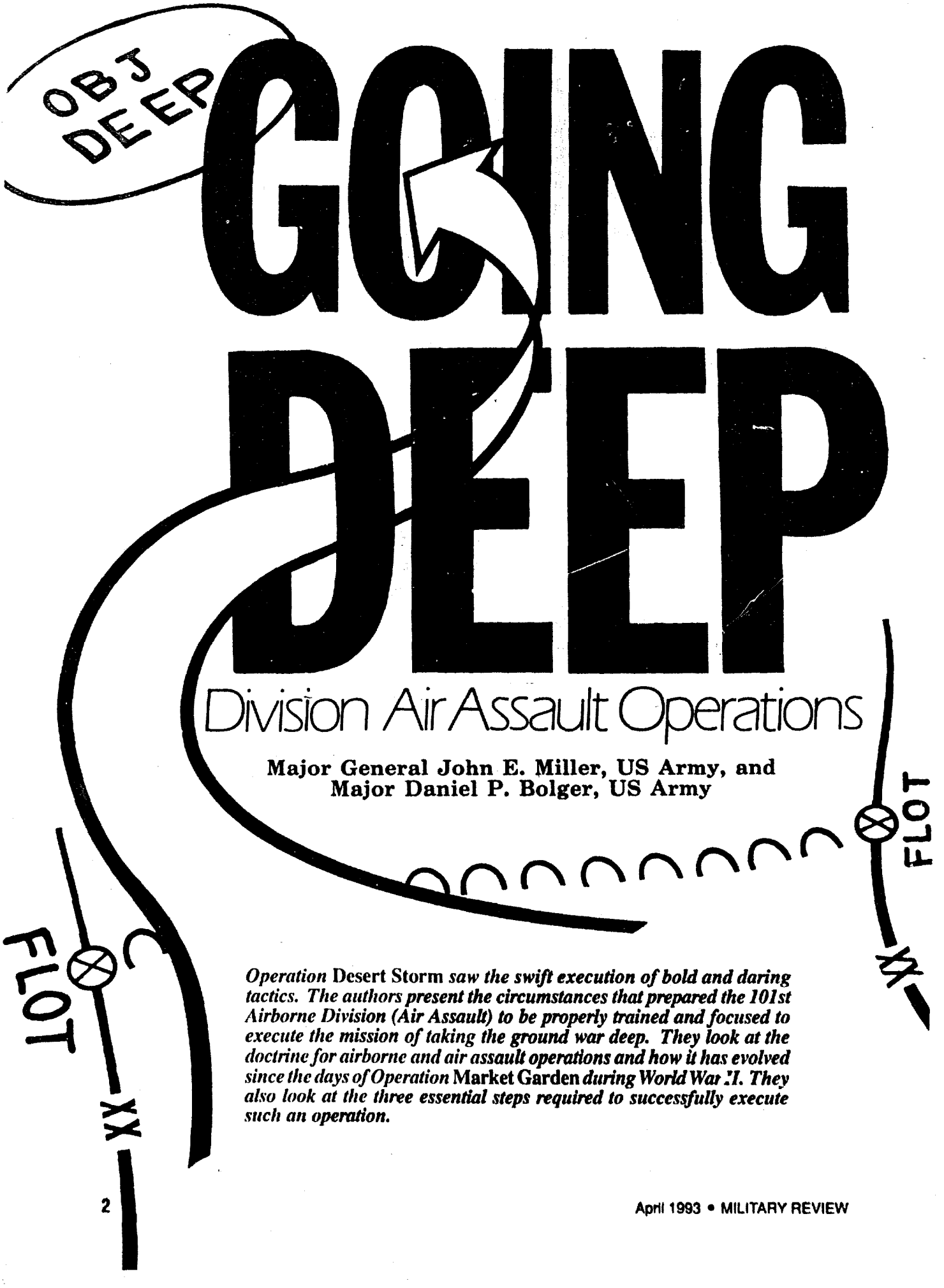
For the most part, the right stuff comes in—sometimes from authors with high rank and great credentials but more often from the majors, lieutenant colonels and colonels who are most current in their experience and perspective. It has been their candid input that provides the essential insights into our profession and keeps the debate relevant, objective and focused.

As the Army continues to chart its course through the stormy waters of the post–Cold War/post–Gulf War reorganization, our professional journals should again rise in importance, and rightly so. Where else can soldiers, civilian employees and others with a stake in the profession voice their views freely? Where else can new ideas be offered and debated with the whole profession as witness? Where else can those responsible for officer education and leader development look to find the informed debate and lessons needed to augment classroom instruction?

As the budget noose gets tighter and the downsizing becomes even more of a reality, one longstanding lesson remains very clear. The new, smaller Army will again rely heavily on the education and professional development of its leaders to prepare for the inevitable next call to arms. The Army should look not only to preserve its journals but to ensure they perform the same essential service they did in preparing the officer corps for its warfighting chores in World War II.

This journal has carried a number of articles concerning ideas that have influenced the thought process and preparation for publication of the revised US Army Field Manual (FM) 100–5, *Operations*. Once the manual is published, this debate should not end but continue to provide insight and ideas as to what the authors of that document meant and how it is being received in the field. The Army should once again use its journals to carry the doctrinal debate.

I challenge all of you who read *Military Review* to submit a thought–provoking article on some aspect of our profession of arms. We receive in excess of 400 manuscripts each year for consideration for publication. Generally, the editorial staff can provide a response within 45 days of receipt and, if we feel the manuscript is better suited for publication elsewhere, we will offer a suggestion as to where to submit your article. The pages of this journal are yours to fill.



GOING DEEP

Division Air Assault Operations

Major General John E. Miller, US Army, and
Major Daniel P. Bolger, US Army

Operation **Desert Storm** *saw the swift execution of bold and daring tactics. The authors present the circumstances that prepared the 101st Airborne Division (Air Assault) to be properly trained and focused to execute the mission of taking the ground war deep. They look at the doctrine for airborne and air assault operations and how it has evolved since the days of Operation* **Market Garden** *during World War II. They also look at the three essential steps required to successfully execute such an operation.*

It is within our grasp, fortunately, in the air vehicles now being developed—assault transports, light utility planes, helicopters, and convertaplanes. Forces so organized and equipped will have a predominant influence in future warfare. Their readiness at the very outset of combat is essential, yet unfortunately they cannot be produced, Aladdin-like, overnight.[1]

Major General James M. Gavin, USA, 1954

THE CHILLY fog finally started to thin out about an hour after daybreak. By every indication, the battalion was still all alone, a cluster of dull-eyed, bored men standing sentinel over a lonely wilderness.

For some reason, the embattled Iraqi army saw fit to post the 1st Battalion, 82d Infantry Brigade, 49th Infantry Division (ID) out in this trackless stretch of hardpan desert. Perhaps the high command hoped to keep a watch on "the strategic road network," a grandiosely named string of gravel that ran almost due northwest toward Baghdad just to the south of the battalion's entrenchments. But even if the Zionist-imperialist coalition ever got the guts to launch a ground attack, it might take weeks for them to push this far north. Still, the commander took no chances and dug his men in, after the usual haphazard Iraqi fashion. Orders were orders. At least earthworks would help if those cursed B-52s ever came this way.

Even early on a February morning, 93 miles north of the Saudi Arabian border, somebody had to stay alert while the rest of the battalion stretched, scratched, groaned, kindled breakfast fires and splashed water on themselves. Two forlorn sentries, Senior Soldier Muhammed Aziz and Sergeant Abdul Ghazi, stood together on the southernmost bunker, sharing the twisted stub of a cigarette while gazing idly south.

The pair had been up all that cold, foggy night. While waiting for their relief, they lowered their heads and stomped their rag-wrapped feet, in the manner of weary cattle anxious to go to the barn. There had been noises all through the dark hours: distant grumbles like thunder, the hum of jets far above, the occasional smack-smacking of a passing helicopter or two. So it had gone for weeks now, ever since the American demons started their brutal aerial bombardment. Aziz and Ghazi had no reason to think that this morning might be different. They were wrong.

From the southern skyline came a regular, pulsating thrumming, like soft spring rain on a sheet metal roof, rising steadily with each passing moment. The noise grew harder and louder, insistent, sharpening into a flat, staccato beat, as if the desert to the south had somehow given birth to a legion of thin-bladed metal fans, all running at low setting. It echoed and deepened, a whirling cacophony swelling in numbers, a myriad of tinny snapping and whacking, rolling in from the southwest, a squall line of noise heralding something awful, something that no Iraqi ever wanted to witness.

Ghazi had no choice but to look toward the sound. He and Aziz stared, along with a dumbfounded majority of their battalion of comrades, scattered atop the bunkers and along the crumbling lips of their trenches. Some stood with shirts open, others with cups hanging forgotten in nerveless fingers, only a few with automatic rifles dangling uselessly in limp hands. The men watched and listened in frozen poses, mouths gaping, eyes wide, as motionless as rabbits paralyzed in the headlights of a speeding truck. Every Iraqi soldier could not help but see them now.

Dark specks materialized out of the last vestiges of fog, suspended just above the horizon, a vast, malevolent locust swarm smeared across the blank, pearly canvas of the southern sky.

Modern air assault operations such as Cobra represent the latest and most potent expression of the airborne idea pioneered during World War II. . . . Only recently, however, have battle experience, cogent doctrine and wondrous new technology combined to create air assault units that can strike deep enough, hard enough, fast enough and often enough to decide a campaign.

They were helicopters, US aircraft, rotary–winged warhorses by the dozen, more than a hundred in all. Smaller ones climbed and dove and spun above their partners, but the heart of the formation bore in relentlessly, right for Ghazi, Aziz and their doomed fellows. The approaching horde of green–black aircraft hammered out their ever–harsher tattoo, a mindless, roaring clatter, the hellish war song of military helicopters closing in for the kill.

By their very nature, cross–FLOT operations present soldiers with a win big or lose big proposition. True, a successful deep operation might decide the whole campaign. On the other hand, a brigade that goes deep may well be cut off, cut up and lost forever. Every cross–FLOT thrust threatens the prospect of 3,500 dead, wounded or missing in a single operation.

Ghazi and Aziz had faced Iranian madmen together for two and a half years, even beaten back their waves of devil children in the fetid swamps of the Euphrates River delta, but they had never seen anything like this. These angels of death, rank on rank of vengeful Yankee sky warriors, had at last come to the road to Baghdad, and come to stay. No man, not even the bravest Iraqi soldiers, dared stand against them.

It did not take very long for the American soldiers to secure Forward Operating Base (FOB) Cobra. Within hours, ungainly Chinooks brought in enough ammunition and fuel to press several restless Apache attack helicopter battalions another 62 miles north to the Euphrates River valley, where the aviators neatly severed the key highway between Baghdad and Kuwait. Reports accurately described Iraqi resistance at Cobra as light. There were no American fatalities.[2]

The seizure of FOB Cobra constituted the largest and deepest air assault in military history. Many military experts, General H. Norman Schwarzkopf among them, consider the Cobra operation and its aggressive, determined exploitation by the remainder of the 101st Airborne Division (Air Assault) to have been a principal contributor to victory in the 100–hour ground war in Iraq.[3] By going deep, really deep, right at the outset of the ground campaign, the Screaming Eagles helped turn the Iraqi flank to operational depth, threatened Baghdad, drew hostile forces away from VII Corps' equally impressive armored envelopment maneuver and snapped the enemy artery linking Baghdad to Basra and Kuwait. The successful seizure of Cobra proved just how decisive a deep air assault could be.

Modern air assault operations such as Cobra represent the latest and most potent expression of the airborne idea pioneered during World War II. Airborne forces have always promised a capability to strike directly into the enemy's vital rear areas. Only recently, however, have battle experience, cogent doctrine and wondrous new technology combined to create air assault units that can strike deep enough, hard enough, fast

Deep Air Assault Operations —The Process—

1 — Decide
- Higher Mission and Intent
- Risk Assessment

2 — Battlefield Preparation
- Intelligence
- Fire Support (includes JSEAD)
- Command and Control
- Combat Service Support

3 — Execute
- Attack Aviation Inner and Outer Rings
- Preassault Fires
- Timing of H–hour
- Continuous Combined Arms Effort (Follow Through)

Figure 1

enough and often enough to decide a campaign in a blistering flurry of lightning blows.

In 1944, a lightly armed US Army airborne division, about 6,500 soldiers, might make about one combat parachute and glider assault every three months, provided enough troopers survived the panzers on the previous iteration.[4] Today, a lethal middleweight air assault division can project a brigade combat team, about 3,500 soldiers, and a three–battalion attack helicopter brigade 90 to 100 miles into harm's way every night, and even the strongest enemy tank units usually crack under a combined arms onslaught led by powerful AH–64A Apaches.[5] Thanks to that kind of capability, going deep and fighting it out in the hostile "back forty" becomes a very real option for America's senior commanders.

It is important to note that while the air assault division is organized, trained and equipped to go deep, all modern US Army and Marine Corps divisions include an affiliated aviation structure that would permit similar operations when properly reinforced with nondivisional attack and assault aviation battalions. Army doctrine for divisions states this quite clearly: Deep maneuver at division level is predominantly accomplished by airborne, air assault or attack aviation units.[6] Divisions focus on the latter two means, since only one division routinely employs paratrooper battalions, yet all own attack and lift helicopters. Of course, the scale, depth and frequency of heliborne operations may be reduced according to what can be mustered or borrowed. But unquestionably, the capability is there to be used.

The trick to it all involves getting across the contested battlefront. Doctrine writers call this effort cross–FLOT (forward line of own troops) operations, a brief term that encompasses the most daunting of combat missions—making it through enemy lines and going deep with the intention of staying. It does not just happen, and so the experiences of the Army's air assault division might give some useful insights to those military professionals interested in the promise and peril of deep maneuvers.

A CH-47 whips up clouds of sand at a forward position, 27 February 1991.

It did not take very long for the American soldiers to secure Forward Operating Base Cobra. Within hours, ungainly Chinooks brought in enough ammunition and fuel to press several restless Apache attack helicopter battalions another 62 miles north to the Euphrates River valley, where the aviators neatly severed the key highway between Baghdad and Kuwait.

To go deep, the air assault division proceeds through three important, sequential steps: deciding, battlefield preparations and executing (see fig. 1). The result, when well done, will be an effective brigade–size deep operation. The 101st Airborne's leap to Cobra during the Gulf War offers a useful illustration of just how this cycle works.

Clearly, deciding the mission of the deep operation must come first.[7] Normally, the task will be offensive in nature, revolving around the seizure of key terrain or defeat of a specific opposing formation. The nature and location of the objective will be intimately related to the purpose

of the mission. Deep attacks usually aim to interdict enemy lines of communication, block enemy reinforcements, destroy crucial service support facilities and command posts or cut off withdrawals.[8]

When formulating a deep air assault mission, planners constantly consider the degree of risk to friendly forces. By their very nature, cross-FLOT operations present soldiers with a win big or lose big proposition. True, a successful deep operation might decide the whole campaign. On the other hand, a brigade that goes deep may well be cut off, cut up and lost forever. Every cross-FLOT thrust threatens the prospect of 3,500 dead, wounded or missing in a single operation. To be able to recognize which objectives are worth those risks and when to take them, warn the doctrine writers, is a product of experience, training and knowledge of the capabilities and intent of the friendly and enemy units.[9] Tired, harried commanders must have the guts to press on, change orders or abort in the face of the usual welter of half-truths and partial reports that make effective combat leadership such a high art.

A good mission decision may be made based upon a map and intuition, but the gap between initial vision and final result can only be spanned by unrelenting efforts to shape reality to match the vision. Even the best decision will not hold up unless the division works hard to set the conditions for victory.

During the war against Iraq, the 101st Airborne Division went through two major planning cycles before settling on Cobra as the site for the initial insertion. The first scheme, division Operation Plan (OPLAN) 90-4, proposed a wide western envelopment focused upon taking As Samawah, a Euphrates River valley town of some 10,000 inhabitants athwart the Baghdad to Basra Highway 8. The XVIII Airborne Corps intended to block enemy movement along that critical road, and seizing As Samawah could certainly do that—provided it worked. Though the payoff could be impressive, few wanted to stomach the dangers of forcing a brigade into a defended urban area bristling with air defense guns, let alone sustaining a grinding house-to-house fight.[10] So OPLAN 90-4 went back on the shelf, and the division looked for a better way to cut Highway 8.

That better way turned out to be OPLAN 90-5, the concept that gave birth to FOB Cobra (see fig. 2). The Cobra variant amounted to "hitting 'em where they ain't" with the initial landing, establishing a secure logistics facility and then flying out to interdict Highway 8 with aviation and follow-on combined arms task forces. Cobra offered a way to turn the Iraqi flank and slice Highway 8 at a significantly lower risk, as well as positioning forces for a series of several possible successive heliborne attacks that would be hard for the Iraqis to predict or to counter.[11] Cobra turned out to be the right decision.

A good mission decision may be made based upon a map and intuition, but the gap between initial vision and final result can only be spanned by unrelenting efforts to shape reality to match the vision. Even the best decision will not hold up unless the division works hard to set the conditions for victory. Every battlefield operating system must receive attention to prepare for a successful cross-FLOT mission, but four demand special interest: intelligence, fire support, command and control and combat service support.

Intelligence rightly holds primacy of place. Air assault forces endeavoring to go deep need to find out four things about the foe. First, they look for the enemy air defense array, which left unchecked can disrupt deep aviation operations. Second, analysts try to pinpoint hostile artillery, the enemy's most rapidly responsive means of engaging a surprise landing in his tender rear echelon. Third, intelligence experts search for the opponent's command and control nodes and networks, his elusive brain and nervous system that can marshal a devastating counter to any deep attack. Finally, the division hopes to identify those mobile reserves in position to threaten the deep maneuver forces. All of these efforts

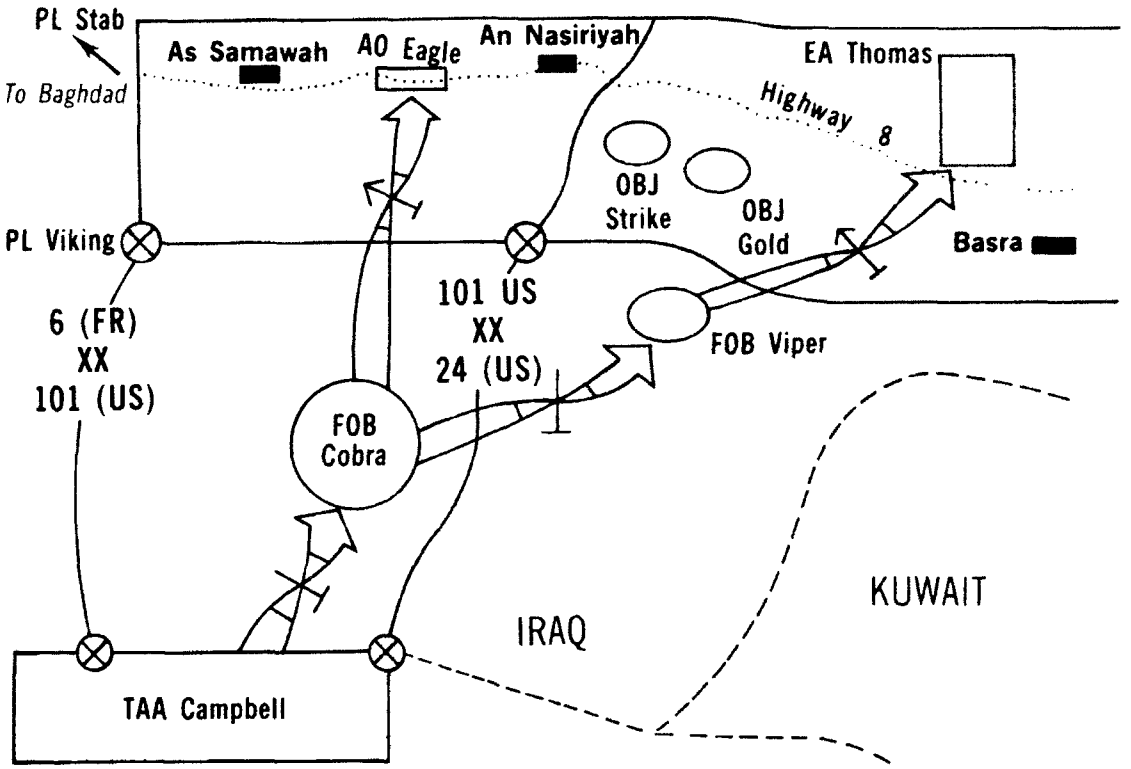


Figure 2. Deep Maneuver Against Iraq, February 1991

validate the brainwork of an evolving, detailed intelligence preparation of the battlefield (IPB) situation template through meticulous collection work by aviators, long-range scouts, electronic scanners, target acquisition detachments and national assets. The desired outcome is a reliable picture of the threat, to include a reasonable basis for assessing damage inflicted by preoperation fires.[12]

Fire support kills and suppresses what intelligence finds. Air assault forces rely heavily on supporting US Air Force (USAF) sorties to strike far beyond the FLOT, as by their very nature deep operations offer an enticing set of lucrative air interdiction and battlefield air interdiction targets. In conjunction with these flurries of swift USAF jets, roving attack aviation, reinforcing corps artillery (particularly the long-range bludgeon of any available Multiple Launch Rocket System batteries), organic artillery, heliborne howitzer raids and electronic jamming all cooperate to rip out the key strips in the enemy air defense grid. For cross-FLOT aviation to have a fighting chance, joint suppression of enemy air defense (JSEAD) paces every aspect of the fire support effort. JSEAD serves as the key that opens the door to cross-FLOT victory.

Once the first holes in the opponents' antiaircraft umbrella have been torn and widened, fire support means twist through to compound the damage. The fire support effort concentrates on freeing the spirited chargers of Army attack aviation to sow mayhem in the opposition's rear areas. Racing through gaps, whether found by stealth or made by fire, night-riding American AH-64A Apache attack helicopter battalions excel in identifying and destroying enemy air defense positions, artillery units, headquarters and vehicle parks.[13] When done right, fire support weakens the enemy's will and paralyzes his response. It is the hard left hook that sets up the finishing right jab of the brigade air assault.

Command and control of an air assault operation undergoes its greatest test during condition

setting. Substantial intelligence and fire support means, to include aviation and maneuver battalions fighting for combat information or battling enemy gunners, are already deep, yet the main effort remains 90 miles separated, waiting to go. Centralized control of all these moving pieces simply cannot happen, not that it would be productive even if it could. Deep operations require more inventive approaches. In the command realm, solutions include mission orders, detailed rehearsals and backbriefs and, most important of all, mutual trust based upon shared experiences and an open command climate. Control fixes rely on a few simple but accurate reports twice a day, well-disseminated procedural controls for congested airspace and smart use of available high frequency and satellite communications.[14] For cross-FLOT missions, success in the command and control system amounts to centralized planning and decentralized execution.

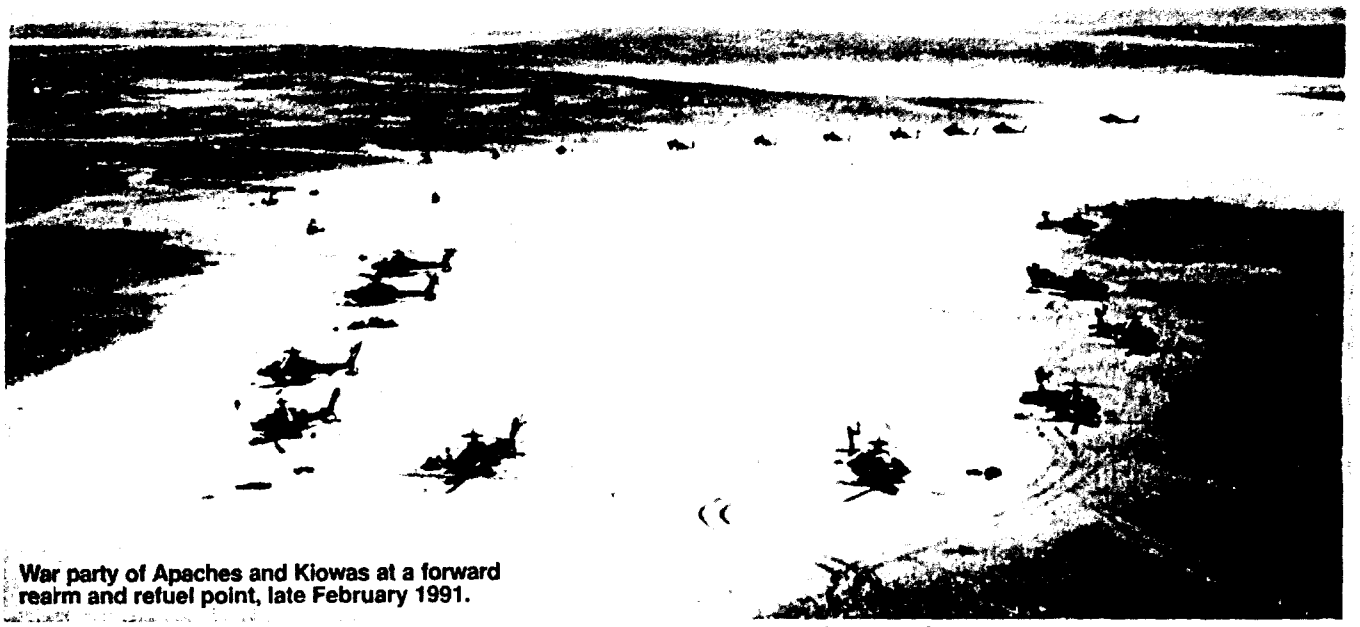
With all the preassault fires shot, the inner and outer rings erected and working and the correct timing decided, the vast combination of humans and machines must follow through, taking the FOB and reducing remaining enemy resistance. The combined arms air assault task force, led by riflemen and Black Hawk pilots, has to execute to standard or all the preconditions in the world will go for nothing.

Combat service support feeds the ravenous intelligence and fire support efforts to sustain the pressure. Additionally, logisticians echelon their elements to project support forward 90 miles along tenuous air lines of communication. Planners in the division support command (DISCOM) designate tailored, multifunctional logistics assault bases (LABs) to accompany the air assault brigade into its initial landing zones. Follow-on aviation lifts can and do build this austere LAB into a full-blown FOB, capable of servicing and sending forth additional air assaults and attack aviation. Ideally, a ground supply route should be opened within 72 hours of the landing.[15] The struggle to man, arm, feed, fuel and fix, once won, underwrites the success of both the battlefield preparation and execution phases. Setting up sound deep logistics is an absolute necessity—it has to work or nothing flies.

During the war against Iraq, the 101st Airborne Division succeeded at Cobra largely because the conditions had been set properly. Unstinting effort from the outset paid off handsomely at H-hour.

In the intelligence sphere, analysts created and refined the IPB that led to the seizure of Cobra—indeed, that site was selected largely based on templates showing nothing there but desert. Beginning on 14 February, the division started its own aggressive collection effort to verify the IPB. Shielded by the ongoing coalition air campaign, attack aviators ranged deep into the division's proposed zone of action, bringing back intriguing videotapes from their infrared sighting devices. Electronic collectors scanned the airwaves for the beeps and burps of Iraqi radios and radars, long-range surveillance teams established concealed outposts overlooking prospective landing zones, and target acquisition radars swept back and forth, seeking enemy firing batteries. Aggressive air and ground patrols and raids netted an incredible 456 prisoners, including a battalion commander. Intelligence staffs sifted and digested it all, gradually piecing together a mosaic that transformed into a clearer and clearer portrait with each passing hour.[16]

Deep fires, to include 105mm artillery raids, were planned based upon the emerging intelligence picture. The massive scale of coalition aerial bombardments, especially with two B-52 saturation "boxes" conveniently astride the division's zone, had already done massive damage to the Iraqi defenders' air defenses, communications and morale. Most of the remaining suppressive work fell to the division's attack helicopter battalions. Apaches flew around the clock to ferret out and engage enemy positions, often with the help of USAF A-10 Thunderbolt IIs. Antiaircraft guns attracted particular interest. On



War party of Apaches and Kiowas at a forward rearm and refuel point, late February 1991.

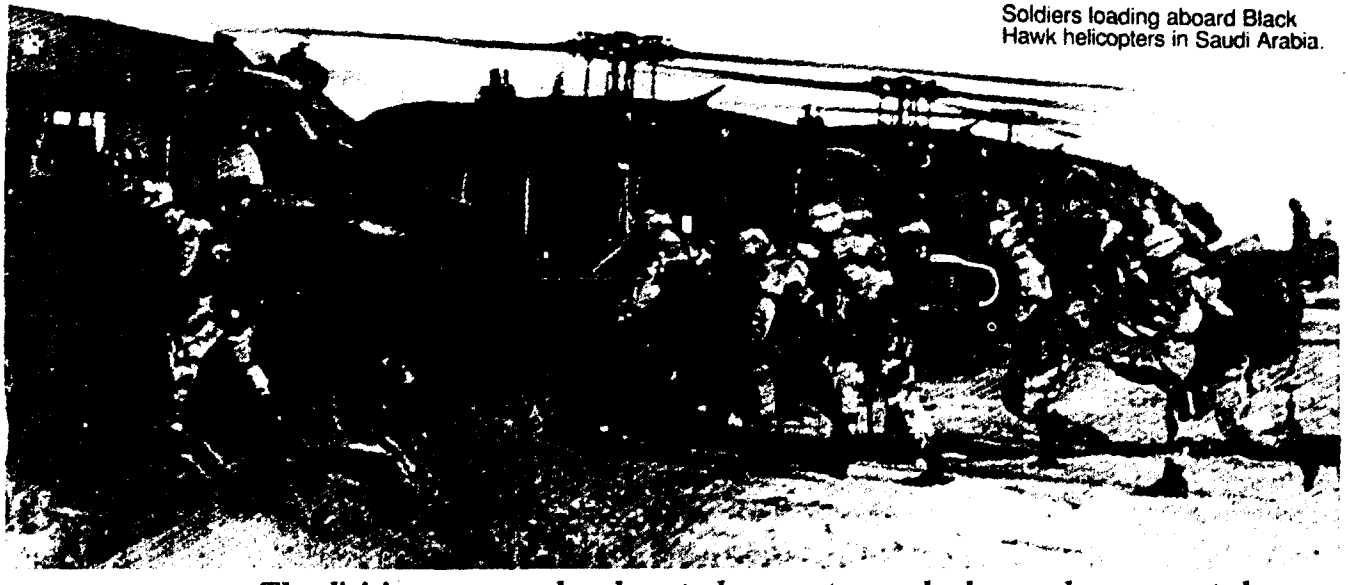
Command and control of an air assault operation undergoes its greatest test during condition setting. Substantial intelligence and fire support means . . . are already deep, yet the main effort remains 90 miles separated, waiting to go. Centralized control of all these moving pieces simply cannot happen, not that it would be productive even if it could. Deep operations require more inventive approaches.

20–21 February, the 101st Aviation Brigade orchestrated a battalion–size air assault to destroy an Iraqi battalion defending along a chosen air route to Cobra. Fire support effectively opened multiple air avenues of approach and battered the local Iraqi forces into confused impotence.[17]

The division command and control apparatus adjusted to meet the situation as the countdown to Cobra continued. It had never been expected to commit infantry across the FLOT while setting the conditions, and yet the nature of several situations demanded combined arms attacks to clear them up. Along with everything else going on, the division had to reposition forces across more than 550 miles of cold, stormy, empty Saudi desert and carry out the completely unprogrammed diversion of a brigade to backstop VII Corps for several weeks. Hard training, thorough rehearsals and well–tested standing operating procedures came to the fore. The division proved able to look, talk and think way forward and way back simultaneously.[18]

Finally, the division's DISCOM fought and won a terrific war against time, distance, weather and friction to deliver service support to the units already flying and fighting deep, all the while readying for the great leap to Cobra. For the logisticians, the ground campaign began on 14 February and did not let up until well after the cease–fire. Rarely had anyone in the DISCOM been able to train to resupply forces at this scale and pace. The principles were known, and the piece parts familiar, but it is one thing to imagine a LAB or FOB and quite another to execute one in combat. DISCOM prepared well for the first wartime validation of the LAB and FOB concept.[19] Thanks to a lot of hard driven miles and many slingloads, the division would fly in to Cobra "full up," ready to carry out sustained, successive air assault operations.

And yet, even when the decision turned out to be correct and with the battlefield shaped for decisive action, executing an effective deep operation is not a given. It has been said that riflemen must close that last hundred meters by force of willpower, strong legs and a good trigger squeeze when it counts. Air assault riflemen and their combined arms comrades need the steel in their backbones and fire in their bellies to fly that lonely 90 miles beyond the FLOT, knowing all



Soldiers loading aboard Black Hawk helicopters in Saudi Arabia.

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the while that when the chopper pulls pitch on a hot landing zone, they plunge instantly into those dreaded last hundred meters. As for the aviators, the entire flight is replete with danger, if not due to the enemy, then from the unforgiving dark ground or accidental jostlings of a tight, blacked-out formation skimming along wrinkled terrain at stomach-wrenching speed.

Execution demands a rapidly increasing series of targeted blows that reach a crescendo at H-hour, aircraft touch down time. Apaches, as always, play a starring role. Having set the conditions for landings, AH-64A units proceed to enforce the isolation of the objective areas, developing a double ring around the prospective forward operating base. One attack battalion, under operational control (OPCON) of the air assaulting brigade, creates an "inner ring" ranging out up to 25 miles from the FOB line. These Apaches concentrate on finding and destroying local enemy reserves and remain available to intervene directly into the FOB if the ground assault requires their support. Meanwhile, the division's aviation brigade establishes and maintains an outer ring of attack helicopters, roaming out to 150 miles from the FOB line in an aggressive and unceasing effort to seek and eliminate any enemy mobile forces prodded to action by the massive American deep attack.[20]

Next comes final preparation of the routes and landing zones, a compressed, concentrated dose of condition setting to find, fix and kill or stun the antiaircraft sites and enemy forces threatening the force. This typically entails an Apache armed reconnaissance about 2 hours out (usually en route to the inner ring battle positions) and a comprehensive JSEAD program of aerial and surface fires to scour the air route, all laced with liberal doses of planned and on-call USAF close air support. To cap it off, a short, intensely violent battering of the enemy around the landing zones lifts a minute before the first UH-60A Black Hawk flares to discharge its soldiers. It is often a good idea to emplace a helicopter-delivered 105mm battery just prior to H-hour in an offset landing zone; it guarantees responsive fire support 90 miles from the friendly front lines.[21]

Once the twin rings of attack aviation fly into position and the hostiles around the objective have been well and truly pounded, it is time to land. Conditions at the objective, not the digits on the clock, drive the time of attack. Flexibility is an integral aspect of air assault planning and execution. On deep operations, therefore, a

window to attack or a "not later than" time is preferred to an absolute, World War I type "zero hour." This explains the preference for the generic H-hour in air assault planning. That familiar technique nicely accommodates adjustments in the time of attack.[22]

Finally, with all the preassault fires shot, the inner and outer rings erected and working and the correct timing decided, the vast combination of humans and machines must follow through, taking the FOB and reducing remaining enemy resistance. The combined arms air assault task force, led by riflemen and Black Hawk pilots, has to execute to standard or all the preconditions in the world will go for nothing.

At Cobra, the 101st Airborne Division executed to standard. Despite exhaustive intelligence and 10 days of extensive preassault condition setting, the day of the attack presented two challenges. First, heavy fog delayed H-hour until after sunrise. The flexible timing that characterizes air assault operations came into play, and more than 100 helicopters carrying dozens of small units smoothly shifted to the later starting time. H-hour changed, but the plan did not.

Second, and potentially more unnerving, a previously unidentified Iraqi infantry battalion surfaced in the northern part of Cobra. But the brigade combat team commander, well aware that despite all the battlefield preparation, there was still a possibility for organized enemy resistance. The Americans came in ready to fight for Cobra. Preassault bombardments, continuous supporting fires after H-hour, timely close air support and a clutch of vigilant "inner ring" attack helicopters, not to mention quick actions on contact by two infantry battalions, soon smothered the hapless opponent. The Iraqi outfit surrendered.[23] By not cutting corners in the execution phase, the air assault soldiers confronted and bested foul weather and an unexpected hostile response to take FOB Cobra.

Of course, in the Cobra example, the decision and condition setting phases lasted many days more than they might in other situations. Indeed, during the rest of the "100-hour war," the 101st Airborne Division operated at a much quicker tempo. Here lies one of the true strengths of a division purpose-built for deep attacks. Any modern Army or Marine Corps division may mount one of these missions every week or so, given the ebb and flow of conventional combat. An air assault division, however, can pull off such a feat every 24 hours.

In an air assault division, the typical battle rhythm allots about 24 hours (a day and a night) to each part of the cycle, with the result being a brigade air assault or aviation brigade attack operation about 48–72 hours after the ball starts rolling. It is not unusual to have all three brigade combat teams and the aviation brigade working through different segments of the deep operations process. Each brigade's current phase sets up the next one's future actions, and every completed brigade jump threatens everything within 90 miles of the landing zone. The cross-FLOT air assault operations cycle spins so rapidly

AH-64s assembling for a combat mission, late February 1991.

Execution demands a rapidly increasing series of targeted blows that reach a crescendo at H-hour, aircraft touch down time. Apaches, as always, play a starring role. Having set the conditions for landings, AH-64A units proceed to enforce the isolation of the objective areas, developing a double ring around the prospective FOB.

through time and erupts so widely across space that no current US foe can really hope to match it.[24] The Iraqis hardly knew what hit them.

In September 1944, three Allied airborne divisions jumped into Nazi-occupied Holland in a bid to grab a bridgehead over the Rhine River. Only one paratrooper battalion ever made it to Arnhem bridge, and the mechanized ground relief force arrived too late to seize the Rhine crossing or save the bulk of the brave British airborne soldiers who had fought so hard to take it. Operation *Market Garden* was a costly failure, perhaps because the airborne had dropped too far away.[25] The idea had certainly been bold and decisive, but the execution went awry.

Today, America's citizenry have seen fit to endow every division with the armament to launch a self-contained *Market Garden*. American soldiers have learned much about deep maneuver since 1944—in hard, unforgiving classrooms called Vietnam, Cambodia, Grenada, Panama and Iraq. There is no such thing as "a bridge too far" for an army that knows how to go deep. ***MR***

The decision and condition setting phases [for Cobra] lasted many days more than they might in other situations. Indeed, during the rest of the "100-hour war," the 101st Airborne Division operated at a much quicker tempo. Here lies one of the true strengths of a division purpose-built for deep attacks. Any modern Army or Marine Corps division may mount one of these missions every week or so.... An air assault division, however, can pull off such a feat every 24 hours.

NOTES

1. Major General (later Lieutenant General) James M. Gavin, USA, "Cavalry. And I Don't Mean Horses," *Armor* (May-June 1954): 22.
2. The opening vignette is a fictionalized account of how the Iraqis may have viewed the actual events described in US Department of the Army, Headquarters, 101st Airborne Division (Air Assault), Command Report, 101st Airborne Division (Air Assault) for Operations *Desert Shield* and *Desert Storm*, 2 August 1990 through 1 May 1991 (Fort Campbell, KY: Defense Printing Service [DPS], 1 July 1991), 46–48. Although the Iraqi unit named in this introductory sketch in fact defended part of FOB Cobra, Sergeant Ghazi and Senior Soldier Aziz are imaginary characters.
3. General H. Norman Schwarzkopf, USA, Retired, quoted in ibid., 62. See also Schwarzkopf and Peter Petre, *It Doesn't Take a Hero* (New York: Linda Grey Bantam Books, 1992), 452, 454, and 466.
4. Clay Blair, *Ridgway's Paratroopers: The American Airborne in World War II* (New York: The Dial Press, 1985), 235. Blair calculates that in Normandy, the 82d Airborne Division and 101st Airborne Division together delivered some 13,475 parachutists and glidermen.
5. Headquarters, 101st Airborne Division (Air Assault), *Tactical Standing Operating Procedures* (Fort Campbell, KY: DPS, 1 January 1992), I-A-1.
6. US Department of the Army Field Manual (FM) 71-100, *Division Operations* (Washington, DC: US Government Printing Office [GPO], June 1990), 1-7. See also FM 100-5, *Operations*, (Washington, DC: US GPO, May 1986), 20.
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8. Ibid., 1-6.
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14. Ibid., 13-15.
15. Headquarters, 101st Airborne Division (Air Assault), *Air Assault Battle Note #11: Forward Operating Base (FOB)*, Change 1 (Fort Campbell, KY: DPS, 1 July 1992).
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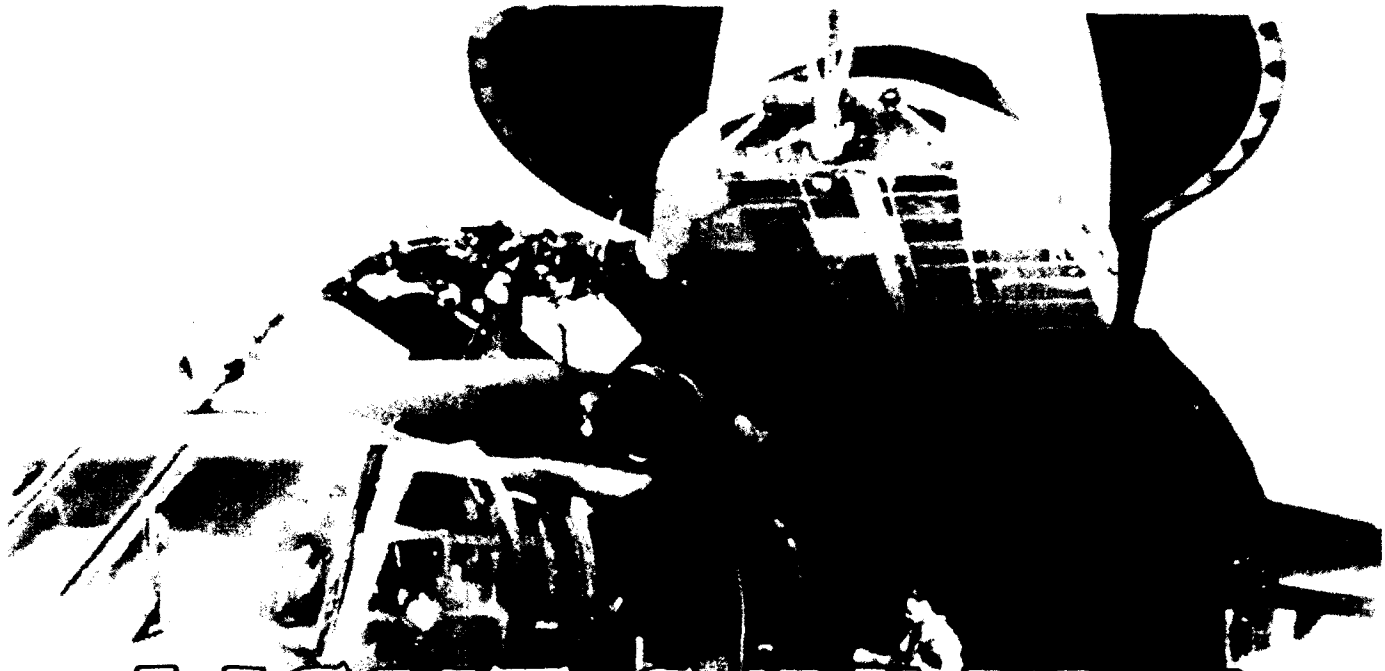
17. Ibid., 41-43.
18. Ibid., 30-43.
19. Ibid., 20-21, 33.
20. LTC David Townsend, USA, "Setting the Conditions" (unpublished briefing), 2.
21. FM 6-20-30, *Fire Support for Corps and Division Operations* (Washington, DC: US GPO, 18 October 1989), B-9-B-11.
22. FM 90-4, *Air Assault Operations* (Washington, DC: US GPO, March 1987), 3-20.
23. Headquarters, 101st Airborne Division (Air Assault), Command Report, 46-47.
24. In the Battle Command Training Program (BCTP) *WARFIGHTER 92-4* exercise (WFX), the air assault division used state-of-the-art simulation technology to conduct deep maneuvers against a northeast Asian threat across mountainous terrain. The BCTP experience confirmed the validity of the cross-FLOT operations process developed over the years and tested in battle against Iraq. See US Army Combined Arms Command, BCTP, *Final Exercise Report on the 101st Airborne Division (AASLT) Battle Command Training Program (BCTP) 92-4, 9-13 February 1992* (Fort Leavenworth, KS: DPS, 2 November 1992).
25. A good popular history of Operation *Market Garden*, and still one of the most readable, is Cornelius Ryan, *A Bridge Too Far* (New York: Simon and Schuster, 1974).

Major General John E. Miller is currently the commander, 101st Airborne Division (Air Assault) and Fort Campbell, Fort Campbell, Kentucky. He received a B.S. from Southwest Missouri State University and an M.S. from Georgia State University. He is a graduate of the US Army Command and General Staff College (USACGSC) and the US Army War College. He has served in a variety of command and staff positions, including deputy commandant, USACGSC; assistant division commander-maneuver, 8th Infantry Division; chief, Program Coordination Division, Office of the Deputy Chief of Staff for Research, Development and Acquisition, US Army, Washington, DC; and commander 1st Brigade, 9th Infantry Division (Motorized), Fort Lewis, Washington.

Major Daniel P. Bolger is currently chief, G3 Operations, 101st Airborne Division (Air Assault), Fort Campbell, Kentucky. He received a B.A. from The Citadel, an M.A. and Ph.D. from the University of Chicago, and is a graduate of the US Army Command and General Staff College. He has served in various command and staff positions, including infantry company commander and battalion staff officer with the 24th Infantry Division (Mechanized), Fort Stewart, Georgia.



LIGHT CAVALRY
Strategic Force for the Future

Lieutenant Colonel Craig B. Whelden, US Army

Given the uncertainties in the world today and the proliferation of both conventional and unconventional arms, the United States must be capable of quickly air–deploying military forces that have mobility and firepower and are self–sustaining. What is needed is a "medium force package," as suggested by General Edward C. Meyer in 1980. It should consist of a regimental–size cavalry force fielded with the Armored Gun System, the Future Scout Vehicle, the M198 howitzer and the Light Helicopter. Such a force could be deployed in fewer sorties than a light division and would have a much greater capability.

ON 2 August 1990, the Iraqi army poured into Kuwait and captured the world's attention. In the next few days, American forces were alerted, and by 8 August, soldiers from the 82d Airborne Division (ABN Div) were on the ground in Saudi Arabia. President George Bush drew "a line in the sand," and the world held its breath as forces were deployed over the next six months. During the first few weeks after the invasion, the only American troops on the ground were the brave, but lightly armed soldiers from the 82d ABN Div. Without heavy armor, these paratroopers would have stood little chance against Saddam Hussein's tanks had they rolled south.

A cover story of *Army Times*, in its review of the division's role in operations *Desert Shield* and *Desert Storm* read "Speed Bumps: 82d Airborne's Shaky Line in the Sand." Many tenuous weeks passed before heavy forces from the 24th Infantry Division (ID) closed into theater. Airborne soldiers were elated to finally see the arrival of M1 tanks, Bradleys and howitzers. Lieutenant Colonel John Schmader, commander, 1st Battalion, 505th Infantry Regiment, said it well:

"We watched with anticipation the landing of the 24th ID. We actually kept track of how many tanks came on a daily basis. You'd see the guys out there clapping because the tanks were coming!"[1]

The world is more complex, and we will likely find that our national security interests will be more and more at risk. Historic changes around the globe have shaped our national military strategy to one that relies less on forward presence and more on power projection. For the Army, this means that contingency and reinforcing forces must be capable of deploying rapidly to anywhere in the world on short notice.

The Gulf War has been a laboratory of lessons learned for the Army. One lesson that was clear, even before the war, was the wide variance in capabilities between light and heavy forces—in deployability, mobility, firepower and sustainability. Prior to *Desert Storm* there had been numerous ideas and concepts, but little movement toward closing the gap between these uniquely qualified types of units. With unprecedented changes in the world and an emerging new role for the United States, the national military strategy will require changes in the shape of our force structure—across all services.

The purpose of this article is to examine the nature and shortcomings of our Army's force structure, and to support the development of a quick-reaction, air-deployable, light armored force that can fill the capabilities gap that currently exists between light and heavy forces. Because the employment of such a force would normally evolve from the president's national military strategy, it is necessary to review some of the recent and dramatic changes in world events and how they are affecting the development of this strategy.

A New World Order?

On 13 April 1991, a few short weeks after the defeat of Iraq, Bush delivered a speech to the Air University, Maxwell Air Force Base, Alabama. Here, he outlined his vision of "The New World Order" as one based on four shared principles:

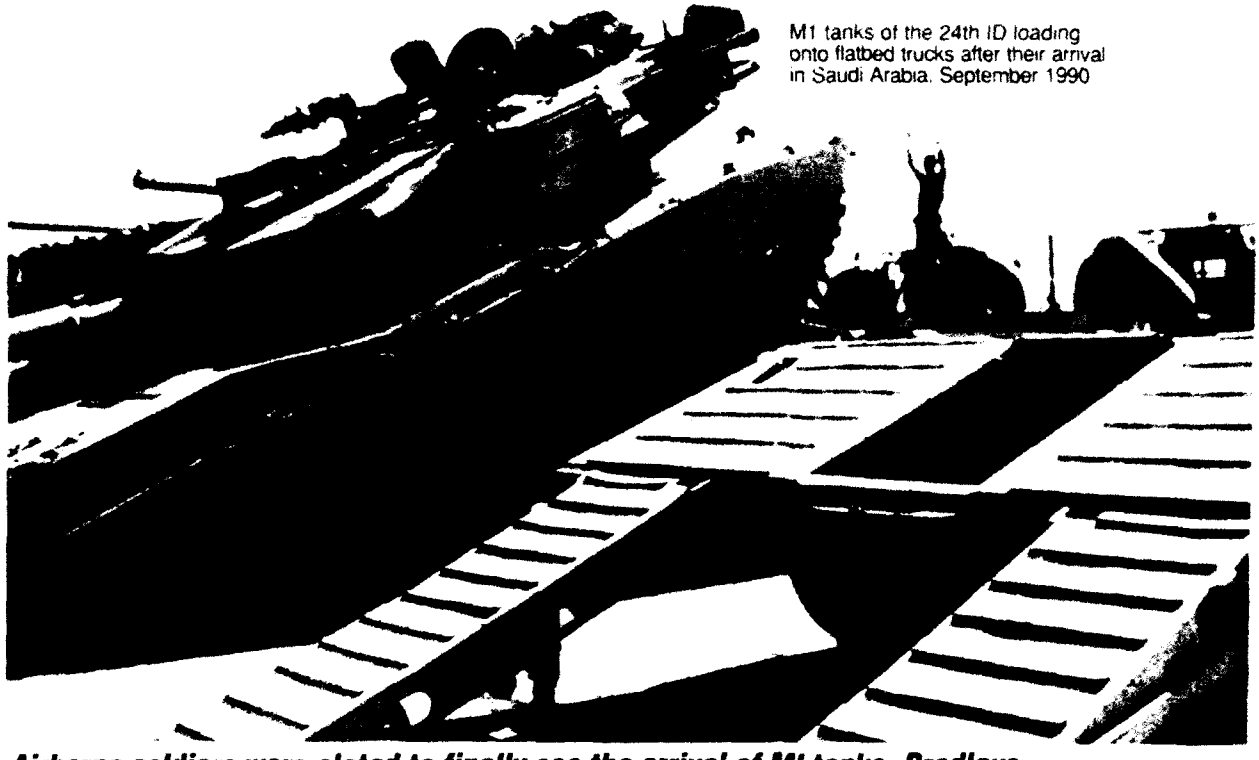
"It [the new world order] springs from hopes for a world based on a shared commitment among nations large and small, to a set of principles that undergird our relations. Peaceful settlements of disputes, solidarity against aggression, reduced and controlled arsenals and just treatment of all peoples."[2]

Time will tell whether or not the president's vision is prophetic. Events over the past year have shown that achieving these ends will not be easy. Bush clearly understood this, as evidenced by his qualification in the same address:

"We also recognized that the Cold War's end didn't deliver us into an era of perpetual peace. As old threats recede, new threats emerge. The quest for the new world order is, in part, a challenge to keep the dangers of disorder at bay."[3]

The dissolution of the Soviet empire has given birth to some major challenges: How do we define our future relationship with Eastern and Western Europe and the new "Commonwealth" of former Soviet republics? What authority will this new commonwealth exercise? How will our previously negotiated treaties and agreements be recognized? Who will maintain control of the vast and now dispersed nuclear arsenals? To whom will the former Soviet armed forces show allegiance—a central government or individual republics? What will be the long-term effects of nationalistic, cultural and ethnic epidemics sweeping across Eurasia? And finally, how will the end of the Soviet empire affect the rest of the world?

These and other questions about the former Soviet Union are difficult to answer, since the only "constant" seems to be change itself. Every day brings a new chapter in the quest for national and ethnic identity. Even as freedom-seeking republics of the former Soviet Union struggle for their own independence and recognition, nationalistic factions threaten to break brittle coalitions within the republics.



M1 tanks of the 24th ID loading onto flatbed trucks after their arrival in Saudi Arabia, September 1990

Airborne soldiers were elated to finally see the arrival of M1 tanks, Bradleys and howitzers. [The] commander, 1st Battalion, 505th Infantry Regiment, said it well: "We watched with anticipation the landing of the 24th ID. We actually kept track of how many tanks came on a daily basis. You'd see the guys out there clapping because the tanks were coming!"

The breakup of the Soviet Union has had a disquieting effect on much of the rest of the world as well. Without superpower competition, nations and nationalistic groups are "testing freedom's waters"—some violently. Third World countries, no longer in the Soviet or US sphere, are reaching out for their own identity. The world is potentially more dangerous now than at any time since World War II.

An Evolving National Military Strategy

The world is more complex, and we will likely find that our national security interests will be more and more at risk. Historic changes around the globe have shaped our national military strategy to one that relies less on forward presence and more on power projection.

For the Army, this means that contingency and reinforcing forces must be capable of deploying rapidly to anywhere in the world on short notice. Both the military and Congress have agreed that to do this will require improvements in our strategic deployability, both air (C–17) and sea (strategic sealift ships).

Although *Desert Shield* made this point painfully clear, it was not a new lesson. We have known it for years. In his 1980 White Paper, General Edward C. Meyer, then chief of staff of the Army, called for a more flexible "spectrum of force" including "medium force packages for rapid deployment missions."[4]

The past few years have proved the absolute need for such forces. However, the proliferation of arms in Southwest Asia and in the Third World requires a much greater combat capability than is offered by light infantry divisions, the 1980s' answer to Meyer's vision.

General Gordon R. Sullivan, our current chief of staff, has recently repeated the call for a truly strategic Army: "My vision of the Army is a strategic force trained and ready to fight and

We must break the mold of the 1980s and, even with growing fiscal minefields facing us, recognize the need to vigorously argue for proper forces. The Army must be capable of projecting overwhelming combat power over a short period of time in order to defeat potential threats across the spectrum of conflict. We must examine carefully the types of units that constitute the contingency corps, and what strategic assets are needed to move them.

achieve decisive victory wherever and whenever America calls . . . . The United States has worldwide interests, so the Army must be ready to fight anywhere. As a strategic force, the Army must have global reach."[5]

Sullivan went on to say: "The design of our units, too, will flow from the requirements of the new doctrine. I expect the doctrine development process to be an informed debate over the next year that will yield recommendations on the size and composition of our formations from company to corps."[6]

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Structure of the Army Contingency Corps

Currently, the JCS chairman's base force allocates five Army divisions to the contingency corps: one airborne, one air assault, one light and two heavy. All but the heavy divisions are air deployable. The heavy divisions must be moved by sea, but as we found during *Desert Shield*, this is easier said than done. Both shipping and air transport assets are woefully short. During the buildup for the Gulf War, we were even using Soviet ships to move our equipment to the gulf.

Other factors influencing how military power should be used in contingencies will depend on other variables: What is the threat? Is the theater accessible by sea? If so, are the ports sufficient? Is pre-positioned equipment available? Does the region's infrastructure support the use of heavy forces? Does the crisis allow sufficient time for a military buildup? Must forced entry be used?

Clearly, different scenarios will have different requirements. If the crisis area is inaccessible by sea (which is the case with more than 35 countries around the world), airlift may be the only force projection option. And, if the enemy is highly mechanized (which most large armies are), the exclusive use of airborne or light infantry would be inexcusable.

An example of this type of contingency would be the assistance given to Chad by the French in recent years to help defend against invasion by Libya. Clearly, the exclusive use of light infantry would have been inappropriate, and because forces could not easily be introduced into theater by sea, light armor was airlifted.[8]

Another example is a region that is accessible by sea, and may have the port facilities for offloading heavy forces, but the host country's infrastructure (roads and bridges) is incapable of supporting the use of tanks and other heavy tracked vehicles. Honduras, for example, with only one major paved road in the country (Pan American Highway) and none of its bridges with a weight classification of over 30–35 tons, would not be suitable for the use of our current heavy armored formations. The situation is further compounded during the rainy season.[9] Numerous countries in the world fit this scenario.

Finally, an area might have excellent port facilities and an environment conducive to the use of heavy forces; however, the problem here might be that these forces cannot be introduced

An 82d Airborne Division squad patrolling the outskirts of the Dhahran airhead in Saudi Arabia, mid–August 1990.

Clearly, different scenarios will have different requirements. If the crisis area is inaccessible by sea (which is the case with more than 35 countries around the world), airlift may be the only force projection option. And, if the enemy is highly mechanized (which most large armies are), the exclusive use of airborne or light infantry would be inexcusable.

into theater quickly. As we saw during *Desert Shield*, there was a period in August and September when the soldiers from the 82d ABN Div would have been considered "speed bumps" had Saddam Hussein decided to push south to the port of Dhahran. His hesitation gave the United States and its coalition partners time to build up a sufficiently capable defensive force. Other potential adversaries no doubt learned from Hussein's mistakes and next time, we may not have six months to prepare.

In all three of these examples, the solution to fill the capabilities void is a light armored force that can be rapidly deployed by air. A number of countries in the world have such forces. The United States is not one of them.

The Light Cavalry Regiment

As we saw with *Desert Shield*, there is a capabilities gap in our ability to project forces. Paratroopers from the 82d ABN Div can deploy anywhere in the world in a matter of days, but once on the ground, they lack mobility, firepower and sustainability. Heavy armored forces must be moved by sea, but with only a division's worth of strategic sealift ships, this process can take many weeks—provided the theater is even accessible by sea and the infrastructure will support heavy tracked vehicles.

A light armored force, which is air transportable, is a highly practical and flexible solution providing a more lethal balance and mix. Such a force should be organized as a light cavalry regiment and assigned to the contingency corps. The 2d Armored Cavalry Regiment, which distinguished itself during *Desert Storm* by leading the VII Corps attack on the Republican Guards, is a perfect candidate.

Cavalry has a historically proven record of offering the greatest mix of the combined arms team. As outlined in US Army Field Manual (FM) 100–5, *Operations*, the Army's keystone

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doctrinal manual, cavalry is ideally suited for the widest variety of missions: offense, defense, security and reconnaissance.[10] *Desert Storm* validated the tremendous utility and flexibility of cavalry organizations.

As the commander's "eyes and ears," cavalry is normally structured at both division and corps levels. The heavy corps have doctrinally and traditionally had their own regiment of cavalry. Extremely robust and combat-capable, these regiments have always had a tremendous reputation, and few could argue for changing their current structure. In fact, in 1988 the French liaison officer to the US Army Armor Center (USAARMC) at Fort Knox, Kentucky, said:

"I'm quite ready to ask for US citizenship if I can keep my rank, and if you give me command of an armored cavalry regiment."[11]

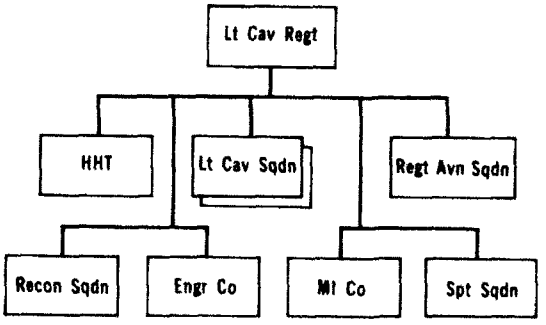
What is missing in the current force structure is a regiment tailored for the contingency corps. For years, the USAARMC has been a leading proponent of organizing and fielding such a force. In 1983, it proposed a light armor regiment as an armor "plug" for the light infantry divisions. This concept further evolved into a light cavalry regiment. In 1985, the Army's chief of staff disapproved the concept, but approved two light armor battalions for light infantry division support.

These battalions were to be fielded with the Armored Gun System (AGS), a 20-ton light "tank" specifically designed for strategic air deployment. However, in 1987, funding for the AGS was terminated. This essentially killed any plans for an air-deployable armor force, since the AGS was the centerpiece of such a force.[12]

In 1989, the commander of XVIII ABN Corps, Lieutenant General Carl W. Stiner, reiterated the urgent need for a replacement for the M551 Sheridan. This rekindled interest in the AGS, and plans were taken off the shelf. Remembering the lessons of *Desert Shield* and *Desert Storm*, Congress has recently funded the purchase of 300 vehicles.

Over the years, US Army Training and Doctrine Command (TRADOC) has considered several force structure options. The regmental-size option (fig. 1) designed by the US Army Armor School (USAARMS), Fort Knox, Kentucky, is a powerful and versatile organization. It consists of 82 AGS vehicles, 106 Future Scout Vehicles (FSVs) (Combat), 80 FSVs (Stealth), 53 light helicopters (LHs) (Comanche), 15 UH-60 helicopters (Black Hawk), three EH-60 helicopters, 16 M198 howitzers and 18 4.2-inch, high mobility multipurpose wheeled vehicle (HMMWV)- mounted mortars.

The regiment consists of two cavalry squadrons (see fig. 2), a reconnaissance squadron, an aviation squadron and a support squadron. Combat support assets would include a light en-



Major Weapon Systems

82 Armored Gun Systems	15 UH-60 Helicopters (Black Hawk)
106 Future Scout Vehicles (CBT)	16 M198 Howitzers
80 Future Scout Vehicles (Stealth)	18 4.2-inch Mortars
53 Light Helicopters (Comanche)	3 EH-60 Helicopters

Figure 1. Light Cavalry Regiment

gineer company and a military intelligence company that is capable of gathering both tactical and strategic information and intelligence. The support squadron would be sufficiently robust to allow the regiment to deploy separately and sustain itself until augmenting corps combat service support assets could arrive in theater.[13]

Wargaming conducted by the TRADOC Analysis Command (TRAC) at Fort Leavenworth, Kansas, indicates the entire regiment could be deployed with approximately 400 C–5 or C–17 sorties.[14] The C–17 is especially important because of its ability to use over 6,000 runways outside the United States that are not usable by the C–5.[15]

By contrast, using a combination of C–5 and C–141 aircraft, the 82d ABN Div used about 650 sorties in its deployment to *Desert Shield*. In addition to this large number of sorties, the division used portions of about 28 ships to position itself in the Persian Gulf.[16]

The bottom line is that the regiment could deploy by air just as quickly, and with fewer sorties than a light division, while providing the theater commander in chief a much greater capability in firepower, mobility and sustainability. The range of options for employment of a light cavalry regiment is greater than perhaps any organization in the force structure. Along with the 82d ABN Div, such a force should be at the top of every contingency planner's Time–Phased Force and Deployment List (TPFDL).

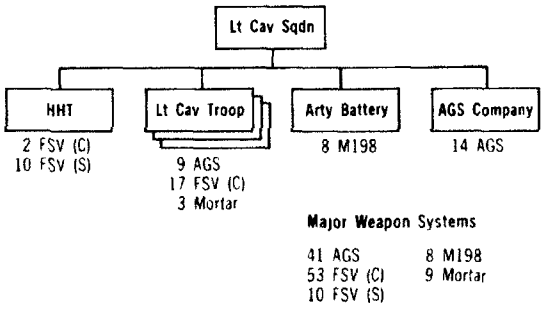
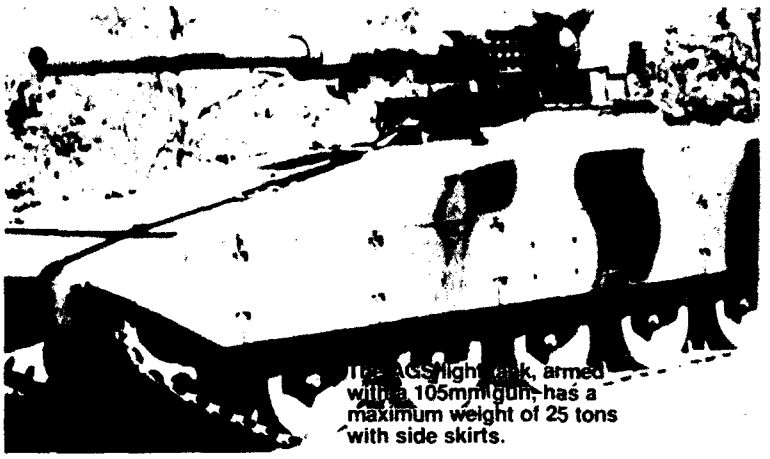


Figure 2. Light Cavalry Squadron



The AGS light tank, armed with a 105mm gun, has a maximum weight of 25 tons with side skirts.

[Some regions are] accessible by sea, and may have the port facilities . . . but [their] infrastructure is incapable of supporting the use of tanks. . . . Honduras, for example, with only one major paved road in the country and none of its bridges with a weight classification of over 30–35 tons, would not be suitable for the use of our current heavy armored formations. The situation is further compounded during the rainy season. Numerous countries in the world fit this scenario.

With most of the new combat systems (AGS, FSV and LH) still in the development stage, fielding such a force is a few years off. In the interim, the regiment should begin forming with available air–deployable systems. These might include variants of the M113, the Marine Corps' Light Amphibious Vehicle, the HMMWV and the OH–58 helicopter. In addition, there are a number of high–quality, light combat vehicles around the world that should be considered.

The lessons of *Desert Shield* make it clear that the requirement for such a force is not for sometime in the future, but *now*.

The Organizational and Operational Plan (now referred to as an Operational Requirement Document) developed by the USAARMC for

Wargaming conducted by the TRADOC Analysis Command (TRAC) at Fort Leavenworth, Kansas, indicates the entire regiment could be deployed with approximately 400 C–5 or C–17 sorties. The C–17 is especially important because of its ability to use over 6,000 runways outside the United States that are not usable by the C–5.

the light cavalry regiment outlines the tremendous versatility and capability heretofore not available to the contingency corps commander:

"The light cavalry regiment will provide the contingency corps commander the capability to effectively see the battlefield and direct combat power decisively at the right place and time. The regiment will provide a rapidly deployable, lethal and survivable mobile combined arms force capable of conducting its missions throughout the depth of the battlefield."[17]

Organizing and fielding a light cavalry regiment for the contingency corps should be a very high priority. Simply having the capability to project such a force adds significantly to deterrence. The presence of light cavalry on the future battlefield will greatly reduce the risk to earlier-deployed (light infantry) forces and provides a compounding effect on the options available to the corps commander.

Light cavalry is not just another combat arms organization. As a strategic asset, it offers more flexibility and capability than any other land force organization currently available to the National Command Authority. Given its deterrent value, force projection capability, combat power and mission profile, it provides more combat potential than an entire light infantry division, both strategically and operationally.

The Army must not retreat from the development and fielding of the light cavalry regiment. Its importance to our national military strategy has been acknowledged since the early 1980s, but never before has the need been so great. The strategic value of light cavalry mandates that it be included in the Army's force structure.

If resourcing is an issue, the debate should not center on whether or not to field such a force, but rather what must be given up to make room for it. Further, it is an organization whose presence on the future battlefield is of such strategic value that potential billpayers should not be limited to just the Army. It is that important. ***MR***

NOTES

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Lieutenant Colonel Craig B. Whelden is the G3, 3d Infantry Division, Wuerzburg, Germany. He received a B.A. from Purdue University and an M.A. from Webster University, and he is a graduate of the US Army Command and General Staff College and the US Army War College. He has served in various command and staff positions in Germany and the Continental United States.

Desert Storm Army Families in Europe

Colonel James A. Martin, US Army,
Major Mark A. Vaitkus, US Army,
Lieutenant Colonel Louis M. Mikolajek, US Army, and
Lieutenant Colonel Malcolm D. Johnson, US Army

This article highlights US Army, Europe's (USAREUR's) family support during the Southwest Asia deployment, and how family members responded to this assistance. This was a stressful period, but most family members coped well. Military leaders built a safety net around their families, and unit spouses and community members actively supported one another. As a result, families were well cared for during Operation* Desert Storm, *and USAREUR enjoyed "homecoming" with a sense of its own accomplishment.

THE WAR in Southwest Asia (SWA) required the early deployment of several elements of VII Corps and a number of smaller USAREUR-based units to the Persian Gulf. Between November 1990 and January 1991, more than 79,000 soldiers left Europe for the SWA combat zone. One of the complications in sending soldiers from USAREUR was planning and executing support for families. Approximately 54 percent of these soldiers were married, and 46 percent had their families living with them in Europe. More than 89,000 family members remained in USAREUR during the deployment.

At the announcement of USAREUR deployments, Generals John R. Galvin and Crosbie E. Saint, the two senior Army officers in Europe, encouraged Army families to remain in Europe. Unit and community leaders were told to place a priority on family support. Wisely, these senior leaders recognized that families of nondeploying soldiers also faced additional stressors—for example, their sponsor's increased work hours in support of the deploying forces and the universal threat of terrorism. Local leaders responded by building "layers of support" to ensure that *everyone* was taken care of during this crisis. Saint's stated position was to err on the side of duplication and overlap in order to create a "family safety net."

The deputy chief of staff for Personnel at USAREUR headquarters established a Family Support Task Force (FSTF) in November 1990. This task force met biweekly until the end of *Desert Storm* and continued to meet monthly until August 1991 to maintain support for families of soldiers who remained in Saudi Arabia and Kuwait, and for soldiers deployed to Operation *Provide Comfort*. Members of the task force included key USAREUR staff and subordinate major commands, such as the 7th Medical Command, 1st Personnel Command and 21st Theater Support Command, as well as family member representatives from major communities and units throughout USAREUR. Over the course of the deployment, the task force initiated more than 100 actions designed to address a broad range of family issues. More than anything else, the task force was a place to "brainstorm" ideas.

The views expressed in this article are those of the author and do not purport to reflect the position of the Department of the Army, the Department of Defense or any other government office or agency.—Editor

When asked in what ways their family support group efforts were successful, 77 percent of the company leaders and 73 percent of the battalion leaders wrote that the group was meeting members' emotional needs. On the other hand, only 38 percent of the company leaders and 64 percent of the battalion leaders felt that the group was meeting family members' informational needs.

Regardless of existing rules or regulations, these ideas received serious consideration. It was a place where creative solutions to common problems could be freely shared across command boundaries. The task force had the ear of the USAREUR commander in chief, and it operated with a "can do" approach.

Among other accomplishments, the task force was behind the creation of a USAREUR-wide "Helpful 1" phone line. This call-in resource, staffed by volunteers in each community, allowed family members (and nondeployed soldiers) to ask questions or raise concerns anytime day or night, seven days a week. Other accomplishments included establishing guidelines for the use of nontactical vehicles for family support functions; instituting limited base support privileges for extended family members acting in *loco parentis*; publicizing methods of reimbursement for volunteer expenses; and obtaining permission for family members to use military dining facilities.

While there were a few problems, overall, USAREUR units and communities did a superb job taking care of families. This article looks at information from community representatives, rear detachment commanders (RDCs), family support group leaders (FSGLs) and family members to highlight some of the more important lessons learned during this unprecedented deployment.

Sources of Information

Information provided by USAREUR headquarters, corps and community representatives at weekly meetings of the FSTF and two related but independent studies provide the basis for this article. Each author was an FSTF member and actively involved in task force activities.

One study, conducted in March 1991 by the US Army Medical Research Unit-Europe (USAMRU-E), was an anonymous mailed survey of USAREUR FSGLs. This survey was designed to elicit group leaders' experiences and perceptions. A total of 442 surveys were sent to FSGLs randomly selected from lists provided by corps and theater support command officials. There was a respectable 48-percent response rate, including data from 83 company and 48 battalion FSGLs, representing both combat and support-type units.

During February and March 1991, Headquarters, USAREUR, conducted its annual Personnel Opinion Survey. This provides the second source of survey data. This family member survey focused on the impact of *Desert Storm* on family members' health, well-being and overall life satisfaction. The survey sample included over 4,000 family members of both deployed and nondeployed soldiers.

FSGL Survey

The USAMRU-E survey asked closed and open-ended questions asked about a variety of issues including demographic characteristics of the leaders (themselves), the structure and operation of their family support groups and relationships with unit and community leaders and service agencies. Family support leaders were asked about positive and negative aspects of their role as group leader and the impact on their own well-being. Finally, they were asked to comment on the adaptation of family members to the stress of deployment. The information presented here focuses on the 83 company and 48 battalion FSGLs in this sample.

Information provided to the family support group task force suggested that the majority of FSGLs assumed their role as a result of their spouse's senior position in the unit. Based on the

Only 25 percent of the company leaders and 40 percent of the battalion leaders worked more than 15 hours per week on activities related to their family support group role. The median number of hours for the company leaders was eight per week, and 13 for the battalion group leaders. Despite the limited hours, many of these spouses felt that their family support group activities interfered "a fair amount or a lot" with their personal life. Their open-ended comments suggested that the most difficult aspect of their role was the "unpredictability" of demands.

USAMRU-E survey, only 10 percent of the company leaders and 4 percent of the battalion leaders said that they were "elected" to their position. On the other hand, 51 percent of the company leaders and 42 percent of the battalion leaders were appointed because of their spouse's role (as commander or other senior unit member).

The majority of units had family support groups before the deployment, and many of the present leaders had been in the role of FSGL for more than a few months. For example, 49 percent of the company leaders and 54 percent of the battalion leaders had held their positions for more than six months.

The survey found that these spouses were not equally as busy with family support group activities. Only 25 percent of the company leaders and 40 percent of the battalion leaders worked more than 15 hours per week on activities related to their family support group role. The median number of hours for the company leaders was eight per week, and 13 for the battalion group leaders.

Spouses of deployed soldiers were critical of the way unit leaders handled family needs during the predeployment. . . . The lack of a family support group was most predominant in units that do not routinely deploy from their home duty station during peacetime training.

Despite the limited hours, many of these spouses felt that their family support group activities interfered "a fair amount or a lot" with their personal life (46 percent of the company leaders and 75 percent of the battalion leaders felt this way). Their open-ended comments suggested that the most difficult aspect of their role was the "unpredictability" of demands. They never knew and could not control when someone was going to call for assistance. Their personal plans and needs would often have to be put aside while they helped someone else. Despite this complaint, the overwhelming majority said that they enjoyed their role as the unit FSGL (88 percent of the company leaders and 78 percent of the battalion leaders felt this way).

Most FSGLs said that they were able to share their burdens with other group members (95 percent of the company leaders and 91 percent of the battalion leaders). There were a few FSGLs who did not or were not able to share the burdens associated with family member needs and demands. These spouses were the most likely to report feeling "burnt out." Survey respondents also echoed family support group task force information that burnout was often related to the continuous demands of a relatively few unit family members.

When asked about their unit's RDC, most FSGLs were very positive. They felt that their RDC was well qualified (52 percent of the company leaders and 51 percent of the battalion leaders felt this way). Only 11 percent of the company and 9 percent of the battalion RDCs were described as "not at all qualified." Seventy-eight percent of the company and 85 percent of the battalion FSGLs describe their working relationship with the unit RDC as "excellent to good." Only 12 percent of the company leaders and 11 percent of the battalion leaders described a "poor to horrible" relationship with the RDC. In addition, FSGLs rated their community headquarters and agencies (such as Army Community Services) as helpful.

When asked in what ways their family support group efforts were successful, 77 percent of the company leaders and 73 percent of the battalion leaders wrote that the group was meeting members' emotional needs. On the other hand, only 38 percent of the company leaders and 64 percent of the battalion leaders felt that the group was meeting family members' informational needs. This distinction is important because over 75 percent of both the company and battalion leaders felt that spouses attend family support meetings for information (as compared to 21 percent and 26 percent citing emotional support as the reason spouses attend these meetings).

Finally, when asked to comment on how unit families were dealing with the deployment (two to three months after their spouses had deployed), about 90 percent of FSGLs said that they had seen very few or no serious adjustment problems among their unit spouses. The modal response to the question, "How long will family members be able to handle the separation?" was six months (52 percent of the company leaders and 67 percent of the battalion leaders gave this response). Most FSGLs believed that if the deployment lasted longer than six months, the number of family problems would increase significantly.

When asked about unit spouses who returned to the United States to "wait out" the deployment, only three percent of the company leaders and five percent of the battalion leaders cited negative reasons for why spouses had left. Seventy-seven percent of the company leaders and 61 percent of the battalion leaders said their spouses left for positive reasons. A typical positive reason was to be with extended family for the expected birth of a child.

Leaving competent and caring RDCs to work with FSGLs and community representatives made a difference. It validated for families the senior leaders' promise that "we will take care of you," and it was the cornerstone for successful family support group operations.

USAREUR Family Member Personnel Opinion Survey

The 1991 USAREUR Personnel Opinion Survey provided a means of assessing the impact of operations *Desert Shield* and *Desert Storm* on the families of deployed and nondeployed USAREUR soldiers. In February and March of 1991, more than 4,000 family members responded to the survey mailed to a random sample of families throughout USAREUR. The respondents reflected the known demographic composition of the total USAREUR family population, and the responses were statistically significant at the 95-percent confidence level.

Based on the survey responses, spouses of deployed soldiers were critical of the way unit leaders handled family needs during the predeployment period. Thirty-five percent felt that they were not given adequate information, 65 percent said that there was insufficient time for family needs and 41 percent felt that leaders were not supportive of families during this difficult period. Written comments from family members indicated the lack of a family support group was most predominant in units that do not routinely deploy from their home duty station during peacetime training.

When asked directly about sources of stress since their sponsors' deployment, spouses of deployed soldiers said that the following issues caused them a "moderate to a large amount" of stress:

- Spouse's safety in the combat zone (86 percent).
- Uncertainty about the length of the deployment (80 percent).
- Concerns about living conditions for soldiers (61 percent).
- Problems communicating with their spouse in Southwest Asia (58 percent).

All respondents were asked how often they experienced a variety of symptoms (such as sadness, loneliness and trouble sleeping) typically related to depression, a commonly used indicator in studies of psychological well-being. Based on their responses, it appears that spouses of deployed soldiers experienced significantly more psychological distress than spouses of soldiers who did not deploy. If one considers the spouses of the nondeployed soldiers to be a "control group," with 10 to 20 percent of these individuals reporting at least one symptom four or more days of the week, clearly a significant proportion (18 to 51 percent) of the spouses of deployed soldiers experienced increased symptoms during this deployment.

Sponsor's rank is a very good indicator of a host of socio-demographic variables (age, income, education, social class, and so on). Data from the personnel opinion survey suggests suggests that regardless of the sponsor's rank, the spouses of deployed soldiers experienced higher levels of distress than spouses of nondeployed soldiers. As one might expect, however, older, more educated, more financially secure spouses were better able to cope with deployment stress and reported fewer symptoms.

When asked about formal sources of emotional and tangible support, the majority of spouses of deployed soldiers described a number of individuals and organizations as reliable sources of support (rear detachment, family support groups, other unit spouses, Army Community Services, the Family Assistance Center, chaplains, neighbors, church groups and, for those working, their supervisors). The vast majority of spouses of deployed soldiers also affirmed that others were available to assist or to just be with them. The percentage of spouses of deployed soldiers confirming that there was "definite" support was

These USAREUR family support efforts might not have been as successful had the deployment lasted for a longer period of time or if large numbers of casualties had resulted during Desert Storm. *This is especially true since many community service support staffs are only one or two people deep, and many community helpers are also family members and potential victims of loss themselves. Fortunately, USAREUR did not have to face either of these challenges.*

substantially higher than that in the nondeployed sample (64 percent versus 44 percent had someone to listen to them, 61 percent versus 44 percent had someone to provide emotional support and 52 percent versus 38 percent could count on someone for emergency transportation).

When asked to evaluate how well they thought they were coping with a variety of life domains (family, social and work responsibilities), most spouses said that on a day–to–day basis they were coping "very or moderately successfully." In this self–assessment, there were almost no differences between the spouses of deployed versus nondeployed soldiers (coping with work 85 percent versus 86 percent, coping with family 87 percent versus 88 percent and coping with social responsibilities 68 percent versus 67 percent). When asked about overall family adjustment to Army life, there was almost no difference between these two groups. Despite the stress associated with their sponsors' deployment and possibly because of the support they felt from their unit and community, the spouses of deployed soldiers remained very positive about their family's overall adjustment to the demands of Army life.

Top–Down Support

It is clear from the USAREUR experience that successful family support starts at the top of the command structure. Galvin and Saint set the tone for Army leaders in Europe. They made frequent public statements reassuring deploying soldiers and their families that the welfare of the soldier's family was a command priority. Subordinate senior leaders echoed this promise. Across Europe, unit and community staffs worked hard to fulfill this commitment. The USAREUR mission became "take care of families!"

The accomplishments of the USAREUR family task force demonstrate the benefits of bringing community representatives and command staff officers together. In an open, creative, "can do" atmosphere, and with access to authorities capable of cutting through red tape and normal bureaucratic procedures, the task force was able to initiate and support actions that helped people immediately.

Leaving competent and caring RDCs to work with FSGLs and community representatives made a difference. It validated for families the senior leaders' promise that "we will take care of you," and it was the cornerstone for successful family support group operations.

Many group leaders assumed their role in conjunction with their spouses' leadership positions, yet most were positive about their experiences and accomplishments. Even when these FSGLs were not working long hours, the nature of the problems they faced (births, child care needs, extended family deaths, serious illnesses, accidents, financial problems, and so on) and the unpredictability in these situations were significant stressors. Fortunately, most FSGLs had someone (either the RDC or another spouse) to support them. One thing they wished for was better preparation for this role, especially information about programs and benefits available to assist family members.

Naturally, the Southwest Asia deployment was stressful for spouses of deployed USAREUR soldiers. Many experienced distress symptoms, but most coped well. It is reasonable to believe that part of their successful coping was a result of the "blanket of support" provided by individual units and communities. Most family members believed that there was someone

nearby to turn to in time of need.

These USAREUR family support efforts might not have been as successful had the deployment lasted for a longer period of time or if large numbers of casualties had resulted during *Desert Storm*. This is especially true since many community service support staffs are only one or two people deep, and many community helpers are also family members and potential victims of loss themselves. Fortunately, USAREUR did not have to face either of these challenges.

The deployment reconfirmed, for most units and communities, the fact that a relatively small number of families often consume disproportionate amounts of resources. It also demonstrated that in times of crisis, most people "rise to the occasion" and that it is always better to encourage coping rather than treat anyone as a helpless victim.

Very early in the deployment, USAREUR leaders recognized that soldiers who did not deploy (and their families) also faced some unique stressors. Many soldiers felt left out, unappreciated and ignored because of all the attention paid to *Desert Storm* soldiers and families. USAREUR leaders addressed these issues. While not relieving all the pain, they made these issues something that could be discussed openly. They also recognized everyone's contributions, whether they served in Southwest Asia or remained in Europe. Leaders made rewards such as soldier (and family) vacations at an Army recreation center in the Swiss Alps available to everyone. Leaders also went out of their way to promise soldiers that service in USAREUR during the war would not become a negative discriminator for promotion and other selection boards.

This article has looked at a variety of support issues for families during USAREUR's deployment to Southwest Asia. It highlights the importance of senior leader commitment to families and describes the operation and achievements of a USAREUR family support task force. It examines information from three related family support assessments carried out during the USAREUR deployment. Information from these studies suggests that unit and community support efforts were keys to success and that family members of deployed soldiers coped well despite the added stress associated with their spouses' deployment to the war zone.

Above all, this article stresses the importance of making resources available at the lowest levels by empowering and resourcing unit RDCs and FSGLs. In most cases, these individuals are the key to successful family support. RDCs must know how to help and must care enough to help. FSGLs and RDCs must share the burden, and the community service agencies must be ready and willing to back them up. Finally, everyone needs to recognize that no one has all the answers, and no one system will always meet every need or expectation. ***MR***

Colonel James A. Martin is the executive assistant, Deputy Surgeon General for Medical Research, Development and Acquisition, Washington, D.C. He received a Ph.D. from the University of Pittsburgh and is a graduate of the US Army Command and General Staff College and the Army Management Staff College. During Operation Desert Storm, he served as a mental health officer with the 2d Armored Cavalry Regiment.

Major Mark A. Vaitkus is deputy commander and research psychologist at the US Army Medical Research Unit–Europe in Heidelberg, Germany. He received a B.A. from Northwestern University and an M.A. and Ph.D. from the University of Michigan.

Lieutenant Colonel Louis M. Mikolajek is a professor at Boston University. He received a B.S. from Canisius College and an M.S. from the Florida Institute of Technology. He is a graduate of the US Army Command and General Staff College. He has held a variety of command and staff positions in Europe, Korea and the Continental United States.

Lieutenant Colonel Malcolm D. Johnson is chief of Current Operations, G3, 3d Infantry Division, Wuerzburg, Germany. He received a B.S. from the US Military Academy and an M.S. from the Naval Postgraduate School, and he is a graduate of the US Army Command and General Staff College. He has served in a variety of command and staff positions in the Continental United States, Korea and Germany.

Budgeting for Readiness

Lieutenant General Johnny J. Johnston, US Army, Retired

With the end of the Cold War and a public outcry for reducing the federal deficit, Congress is looking at where to make those reductions. The author uses the US nonpreparedness in the Korean War as an argument against cutting too much, too quick. He offers insights as to how forces were committed to battle with little or no regard for their training readiness. He suggests that the readiness reporting system be evaluated to ensure that an accurate training readiness picture is obtainable.

ONE OF the most disquieting books a professional soldier or, for that matter, any citizen interested in the nation's well being can read is T. R. Fehrenbach's *This Kind of War: A Study in Unpreparedness*. It chronicles the reduction of the Army following World War II and examines to some extent the mind-set of America's leaders and of America itself as our country searched for peace, prosperity and the good life in the late 1940s and early 1950s. These years are not completely analogous to the late 1980s and early 1990s, but a thread of the analogy is disturbingly present. The Soviet threat appears to be gone and most Americans, including their elected representatives, want a bare minimum spent on a military force that, after all, may not be necessary.

The purpose of this article is to sound an alarm. The specter of June 1950, when Task Force *Smith* was the vanguard of the 24th Infantry Division (ID) into Korea, should never leave us. Our soldiers were committed to combat because there was no other choice, and the lessons learned from their first six months were bitter indeed. We were fortunate in Operation *Desert Storm*. We had time to train and an enemy that proved to be less than tenacious. While there are many lessons to be learned from the Gulf War, my judgment is we need to reflect on the lessons learned in June 1950, in Korea. Without regard for readiness, US troops were committed from Japan, poorly trained, poorly disciplined, poorly conditioned, poorly equipped and in too many instances, poorly led. Our young men paid a ter-

rible price for being unprepared. We must ensure that this event in history never repeats itself.

There is, happily, a major difference between the US Armed Forces of the late 1940s and early 1950s and those of the late 1980s and early 1990s. Today, while being sharply reduced, they are still potent forces, well equipped and led by an officer corps and a noncommissioned officer corps tested by a number of actions from Grenada to Panama to Operation *Desert Storm*. But the competition for government resources between a better life for the inner city versus trained and ready military forces is just beginning. A principal task that falls squarely on the shoulders of the Army's military and civilian leaders is to make sure, to make damned sure, that the condition of our forces never again approaches that of June 1950. Are we, the Army, doing everything we should? I will argue for some straightforward and inexpensive steps that have not been taken, but which can help our leaders maintain a viable military within the level of resources provided by Congress.

Modern, well-functioning, state-of-the-art equipment is important to a competent military, but not the key—the key is training. Training that is focused on those tasks that ensure our ability to go to war and fight effectively anywhere and, if necessary, without significant build-up or train-up periods. One requirement for such a capability is a good body of tactical doctrine and the supporting training strategies. The Army has this in a collection of tasks, conditions and standards, with drills for immediate action at squad, platoon, company and battalion levels that are well thought out and applicable to any theater. Computer-assisted and supported exercises are available for staffs at every level, and soon perhaps, simulations will be developed to enable combined arms teams to train in detail on fire and maneuver. In addition, the Army still conducts tried and true field training, with the best taking place at the National Training Center (NTC), Fort Irwin, California. We have the tools in place. The question is, are we applying these tools and focusing the funds correctly to maximize training readiness?

Training of almost any kind is expensive and consumes the kind of funding that is the hardest to retain: Operations and Maintenance (O&M). Unlike dollars that reflect capital expenditures, there are few patrons in the Congress for O&M expenditures. Furthermore, training covers a broad spectrum of activities. Individual training is fairly straightforward—we know what needs to be taught, to whom it must be taught and what it costs to teach it. At the end of each teaching cycle, we test to ensure the teaching was effective. We know how much individual training costs per soldier; therefore, we can pretty well lay it on the line—the Army needs this much money to train this many people to meet individual training requirements. To do less or to take shortcuts means soldiers are either untrained or not trained as well as they should be. The impact of insufficient dollars for individual training is reasonably measurable and clear.

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Unit or collective training is a horse of a different color. The budget for unit training takes form and substance at the Department of the Army (DA), Department of Defense (DOD) and in Congress. At these levels, such terms as operating tempo (OPTEMPO), trade-offs and "salami slices" are often used to depict what is required for the units versus what is to be made available. The Battalion Level Training Model (BLTM) is used to develop a notion as to how much money should be made available for collective training of all the battalions in the Active

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Component (AC) and Reserve Components (RCs). In the process, some hard data is used—the BLTM says if you perform certain drills and training events a certain number of times to standard, you will travel this many miles and be in the field this number of days. We know how much it costs to move a tank a certain distance and how much it costs to operate a piece of equipment for a certain time. We can lay out for the budgeteers a projection of how many miles, how many hours and how many days in the field are required for the drills and training events. That is pretty impressive to the budgeteers, and the process has been massaged and amended over the years based on results and input from the field, so that it "speaks" now as if this process is an oracle from Delphi.

However, is the process accurate? The number of drills and training events to be performed are based on the size of the budget assumed or issued. To accomplish the training he considers "right," the field commander can take shortcuts. He can "hotbed" tanks and Bradleys at gunnery sites, reduce the distances over which they operate, reduce the number of iterations of training events and he can use simulators of various kinds. All these techniques reduce mileage and hours, hence costs. And what is the impact on training readiness? The answer is: "We just do not know."

We bought the magnificent unit conduct of fire trainer (UCOFT) without knowing, other than intuitively, what it was going to do for us. Talk about luck! We came out of the UCOFT procurement covered with glory, because units that train with the UCOFT shoot better and consume fewer rounds of live ammunition. The savings generated pays for more than the cost of the simulator and provides better-trained soldiers. Hotbedding tanks and Bradleys, reducing distances or number of drills and training events may or may not have such a serendipitous result.

Back in Washington, the budgeteers fight the battle to the bitter end and, finally, the annual O&M dollars to support training and other activities are issued to the field. Now, the art of training management begins in earnest. The battalion commander, if he is new to command, has it both difficult and easy. His job is difficult in that he may not have very much data to go on, certainly not much personal knowledge, perhaps

The Army needs a feedback report on training readiness that will stand audit. . . . AC units must be prepared, on short notice, to be deployed and engage in combat with little train-up time. If this assumption is not correct for particular units, the leadership needs to know it, and in this instance it must be very specific; that is, what can they do, what can they not do without additional training, and how much more in time and money is it going to cost?

an Army Training and Evaluation Program (ARTEP) evaluation or notes from an NTC rotation; still, he is relying on records and reports. His job is easy because he is not responsible for where the battalion is, but rather for where it is going—so he can call a spade a spade. If he has been there awhile, then he is responsible for where the unit is, as well as for where it is going. He will still call a spade a spade, but because of his personal involvement, his judgments may not be quite so objective.

Each battalion commander must make these judgments as he lays out his training program for the year. Accurate, flawed, or somewhere in between, it is the beginning point. He will have help from his higher headquarters, and the more experienced minds involved in a subjective judgment, the more objective it becomes (assuming the minds are trained). The commander makes judgments as to what field training will be conducted and at what level and where, and all of this is balanced against the money and time he believes will be available to train. If there is more than enough money, the training can be better. Do you remember that happening? I do—but it is not likely to happen now. Today, he has to look at what he thinks is required, balance that against the dollars and time available and lay out the year's training program, knowing it can and will be adjusted (probably reduced) at least quarterly.

Now the battalion begins to train, and it is a wonderful thing to behold, for a battalion is a complex system where each part must be trained to do its tasks and then be melded together so that the synergism involved will make the whole much greater than the sum of its parts. However, the reverse of that says the weak or weaker links detract out of proportion, such as a weak intelligence section sharply reduces the effectiveness of the entire battalion, a weak maintenance section likewise, and so on. As the training is conducted, judgments have to be made on the current status of all the parts as to progress or lack thereof. Finally, on a monthly basis for the AC and less often for the RCs, an overall assessment must be made as to the training readiness of the entire unit and that assessment reported up the chain of command.

Reams of paper have been consumed writing about the DA Form 2715 report. It is an understatement to say that the subjective portion of the report (training readiness) is not a good tool for Army leaders to use in assessing our readiness for war. There are a host of reasons, but the basic one is that we do not have a more objective process to rate training readiness at the unit level. This flaw has far-ranging implications.

This might be a good time to confess that this article wells forth from a sense of frustration that has fermented and festered in me for a long time. While serving as the Army's director of training, I was responsible for formulating and defending the Army's training budget. The BLTM gave me a good base and an argument that was respected by budgeteers, but once the budget went to the field there was no good way to judge whether we had just enough, too much or a disaster on our hands. There was, in other words, no effective feedback system. Division commanders complained of not having enough money, ammunition, and so on, but an inspection of the DA 2715 reports rarely showed any impact on training readiness. It is unproductive to ask for more training dollars when readiness reports show units being trained at the C1 or C2 level. Later, as an army commander responsible for the training of approximately 170,000 soldiers in units of every description from combat to combat service support, my goal was to train these units to enable them to meet their wartime mission. As tools to evaluate their progress, or lack thereof, I had the DA Form 2715, the US Army Forces Command IR, the eyes of the readiness groups, my staff and my own personal observations.

MOTC Addresses Physician Shortage

Recruitment and retention of physicians has always presented a challenge for the Reserve Components. While patriotism and camaraderie are appealing, time and financial constraints are major deterrents. Thus, in 1981, the Indiana Army National Guard (INARNG) launched a pilot program, the Medical Officer Training Corps (MOTC), as an approach to the physician shortage.

The medical student, rather than the physician established in practice, was targeted for two reasons. Primarily, recruiting is more effective, since the medical student typically has fewer personal, professional and financial obligations. Additionally, retention is enhanced by the unique structuring analogous to the Reserve Officers' Training Corps (ROTC). It was thus hypothesized that the MOTC program would recruit and retain more physicians compared to traditional means.

The medical student, who must have successfully completed the first trimester of his freshman year, is commissioned as a second lieutenant in the Medical Service Corps (MSC). No scholastic stipend is offered; thus no additional service obligation is incurred.

The students are assigned to the state area command (STARC); however, they are organized into the MOTC program, which functions independently. Checks and balances are assured by three levels of control. The program is coordinated by a full-time MSC officer whose primary mission is the MOTC program. Liaison between the ARNG and the medical school is provided by a traditional ARNG physician and a medical school staff physician, respectively.

Training is tailored to the student's medical school curriculum. Traditional inactive duty training (IDT) and annual training (AT), as well as alternative training such as flexible training is offered. Furthermore, students are encouraged to drill with both medical and non-medical units such as infantry, artillery and aviation.

Both military and medical professional development is emphasized. The students participate in a formal Officer Professional Development (OPD) program, administered by the Full-Time Unit Support (FTUS) MOTC coordinator, to develop military competency.

Electives with military-affiliated medical institutions such as Walter Reed Army Medical Center and Brooks Army Medical Center are available and satisfy both ARNG and medical school requirements. Additionally, the MOTC students assist in retention physicals. This not only enhances the technical skills recently introduced in medical school but also increases the mobilization readiness of the state.

MOTC students are exposed early to the tensions involved with wartime and mass disaster triage, treatment and evacuation. Thus, the MOTC students are integrated with the military physicians in mass casualty exercise training and also complete the

None of these tools, either individually or collectively, were adequate.

To recap: as director of training, I was primarily concerned that we had sufficient resources to train. As the commander, 2d US Army, that was a concern, but the primary concern was whether we were ready to meet our wartime mission and if not, what specifically would be required, by unit, in the event of mobilization. In both instances, lack of an objective way to measure unit training assured that the feedback would be flawed. Moreover, it assured that a great deal of the resources provided would be wasted by units re-doing tasks they already knew how to do.

I needed then, and I contend the Army needs now, an assessment process that describes, in detail, the training status of each unit based on its capability to perform its doctrinal tasks and missions to ARTEP standards. The process must be understandable and clearly indicate the level of training based on the percentage of go/no-go ratings determined in ARTEPs and other rated training exercises. Moreover, the training time

Each battalion commander must make [tough] judgments as he lays out his training program for the year. Accurate, flawed, or somewhere in between, it is the beginning point. He will have help . . . [but] the commander makes [the] judgments as to what field training will be conducted and at what level and where, and all of this is balanced against the money and time he believes will be available to train.

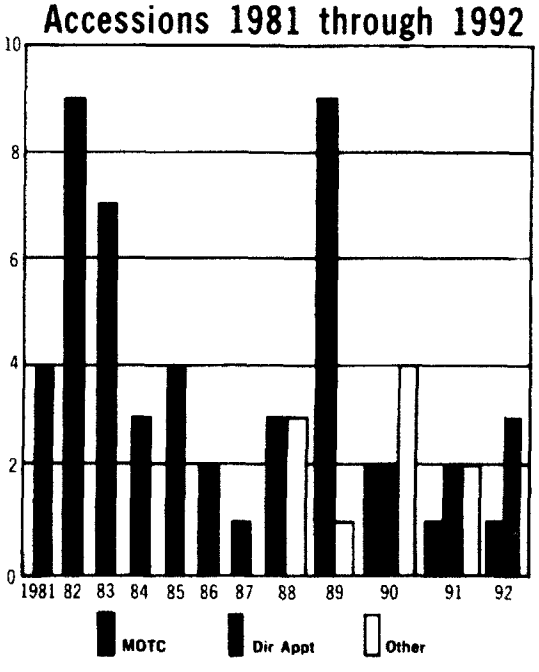
Combat Casualty Care Course (C^4).

Between July 1981 and July 1992, 41 INARNG students graduated from medical school and continued their active status with the ARNG. Sixty-eight percent were appointed into the INARNG Medical Corps (MC) and 32 percent selected out-of-state residencies, transferring to MC positions in other states. Fifty-six percent of the INARNG MC is composed of MOTC alumni. As of June 1992, 64 percent of the MOTC graduates who stayed in Indiana are still active with the INARNG.

When compared with traditional physician recruiting for the past 11 years, the MOTC program is the major source of physician recruitment for the INARNG. The MOTC program recruited a tenfold and fourfold greater number of physicians compared to direct appointment and interstate transfers, respectively (see figure). Finally, in spite of the demands of internship, residency and practice, 64 percent of the MOTC graduates are still active with the INARNG MC.

The success of the MOTC program is based on several critical attributes. The first is a unique structure analogous to the ROTC program, which provides camaraderie in a structured setting. The students' assignment to STARC provides exposure to real-life mission execution, yet the independent organization into MOTC allows targeted training specific to newly commissioned medical officers. A few examples of such training include assuming staff positions analogous to unit organization within MOTC, formal OPD and common soldier skills training.

The second key factor is that training is flexible, adjusted to the student's class schedule and targeted



The Army needs now, an assessment process that describes, in detail, the training status of each unit based on its capability to perform its doctrinal tasks and missions to ARTEP standards. The process must be understandable and clearly indicate the level of training based on the percentage of go/no–go ratings.... Moreover, the training time required for the unit to master each task must be spelled out.

required for the unit to master each task must be spelled out. Master is a tough word and suggests perfection, but perfection is not normally achievable. When it is, it is not affordable in time and resources, and it is not sustainable. A process based on the percentage of go/no–go ratings for the tasks would provide a clear status of training, at the time, without indicating perfection. It would support the establishment of realistic goals for each task and mission and provide focus on the no–go ratings. The process would also provide for understandable and consistent standards for unit deployments. Incidental to the process is the determination of dollars and ammunition required in specific terms. Within the units, the same process would detail the strengths and weaknesses of every section, platoon and company.

A most significant byproduct of such a process is a training readiness report that would stand audit. The Army needs a feedback report on training readiness that will stand audit. The Army's fiscal year (FY) 1993 budget provides O&M dollars to sustain an OPTEMPO of 800 miles for tanks, and 14.5 hours for unit aircraft. The RCs' slice for Army National Guard/US Army Reserve is 288/200 miles and 9/8.1 hours for aircraft.

to his individual training needs. The student may take advantage of flexible training, which is available to selected medical professionals, to meet IDT and AT requirements. MOTC–specific OPD must be available at multiple times in order to accommodate various schedules.

Third, both military and medical proficiency is obtained at multiple levels, including individual, unit and MOTC–specific. Individual training can be completed at medical school–affiliated civilian and military facilities, thereby fulfilling both medical school and military requirements. The students may assist MC personnel individually or as a group with periodic physicals and staffing sick and emergency call. A team of students frequently teaches medical classes to the units. The students are encouraged to drill with medical and non–medical units to gain a working knowledge of unit functions.

Finally, checks and balances are assured by three levels of control. The FTUS MOTC coordinator's primary mission is administration of the MOTC program. Liaison between the ARNG and the medical school is provided by a traditional ARNG physician and a medical school staff physician. All three must be in constant communication to ensure successful representative implementation of the program.

The MOTC was a pilot program introduced by the INARNG to address the state's physician shortage. The success of the program, in both recruiting and retention, has exceeded expectations. The MOTC program is not only the major source of physician recruitment for the state, but in only 11 years, MOTC alumni make up the majority of INARNG physicians. Since one–third of the MOTC graduates have left Indiana for residency, the program is also an important source of physician transfers to other states. Finally, in spite of the time when stresses are peak; such as during internship, residency and the start of practice, the MOTC alumni have stayed in the INARNG, as evidenced by the retention rate.

In conclusion, the MOTC program has been a highly effective recruiting and retention tool for physicians in Indiana. Implementation of similar programs nationwide may be an effective approach to the physician shortage in the Reserve Components.

Major A. Krishna Das, Indiana Army National Guard, is assistant state surgeon, Indiana State Area Command, Military Department of Indiana. A graduate of the Indiana University Medical School, she has served as a commander during several REFORGER *exercises.*

Major Michael Yard, Indiana Army National Guard, is battalion S2/3, 113th Medical Battalion, 38th Infantry Division. He is a graduate of Purdue University and the US Army Command and General Staff College.

Brigadier General Joseph A. Greenlee Jr. is assistant adjutant general (Air), Indiana Air National Guard. He is a graduate of the Indiana University Medical School, Industrial College of the United States and the School of Aerospace Medicine.

The assumption, and correctly so, is that AC units must be prepared, on short notice, to be deployed and engage in combat with little train-up time. If this assumption is not correct for particular units, the leadership needs to know it, and in this instance it must be very specific; that is, what can they do, what can they not do without additional training, and how much more in time and money is it going to cost? The RCs have an even more difficult challenge. While they are allocated considerably less in terms of dollars for unit training, time to train is their most precious resource. What level can they train to, what can they not train to? With the current crop of subjective reports, no one really knows.

Much as it pains me, as an infantryman, to say it, the field artillery has given us a broad picture of a solution. During my last few years in the Active Army, all field artillery units were required to take graded evaluations of their training on all of the tasks outlined in their ARTEPs, and they stood or fell on the numerical scores. During these evaluations, many RC artillery units clearly demonstrated they could do their wartime missions, and they did them magnificently during *Desert Storm*.

In my view, an objective approach such as the one used by the field artillery to measure training readiness, both before and following mobilization, is a necessity in today's world. Several RAND Corporation studies have reached the same conclusion, and they also provide some reasonable approaches for addressing the assessment and readiness reporting issues. I am also convinced we must be able to detail a unit's performance in the field and do a similar assessment as units perform with simulation and simulators. We must be able to determine which tasks and under what conditions a unit can train to standard using other than actual equipment in the field. If we cannot, how can we possibly justify the expenditure of large sums of money to purchase training devices and simulators, and what field commander wants to give up ammunition or O&M dollars to pay for these things when he does not see in objective terms how good they are in helping him achieve and maintain a high level of training readiness?

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Today, through the current readiness reporting system, the National Guard, the US Army Reserve and the Active Army all say they are ready. This may be comforting to those focused on reducing the training budget, but the reports and the methods used to develop them are simply not specific enough to be of value to responsible decision makers. In the past, with Army units sheltered by a nuclear umbrella and forward-deployed forces in place to provide training time, perhaps such a system was more acceptable. But the future is certain to be different. I see no way of avoiding the risk of another Task Force *Smith* without a more objective approach for assessing and reporting training readiness. To reduce this risk, the Army's leadership must focus on the problem, develop a sound solution and implement it as quickly as possible. ***MR***

Lieutenant General Johnny J. Johnston, US Army, Retired, is serving as chairman of the board for Communities in Schools in San Antonio, Texas. He received a B.S. from the University of Nebraska and is a graduate of the US Army Command and General Staff College, Armed Forces Staff College and the US Naval War College. He served in numerous command and staff positions in the Continental United States, Europe and Vietnam. He was commanding general, Second US Army, Fort Gillem, Georgia, and director of training, Office of the Deputy Chief of Staff for Operations and Plans in Washington, D.C.

Team Decision Training
Five Myths and a Model

Gary A. Klein,
Caroline E. Zsambok, and
Marvin L. Thordsen

The authors present an approach to designing and conducting a cost–effective team training program and outline steps that seem necessary to set up an effective instructional program for team decision training. The authors' goal is to provide the tools required for military personnel to adapt training and educational programs to improve development of team decision–making skills.

THERE HAS been a lot of attention to manpower as an important resource, but much of the work of the military is done by teams, and too much of that is undone by teams that waste time, create frustration and confusion and fail to get the job done. The frustration comes from people who sit in meetings and planning sessions and feel that they could do the job faster by themselves if everyone else would just stop talking. The confusion comes from tasks in which team members do not know what is expected from them, or how to adapt to unexpected events.

The term "teampower" refers to effective team decision making.[1] Teampower is a resource, along with manpower, that needs to be developed and used by organizations, particularly those which have seen their budgets reduced and their responsibilities increased. There is now less room for inefficiency.

At one extreme is the highly functioning team that is more than the sum of its parts—tasks are being accomplished that could not be done by any one individual, and could never be broken down and assigned to different people working in isolation. At the other extreme, the dysfunctional team is wasting its members' time and is accomplishing less than what might be done by even the least prepared of the members working alone. The task of team decision training is to move teams from the dysfunctional end of the continuum toward the high performance end, where teampower makes a difference. Team decision training should also prepare individuals to work effectively in future teams and require little start–up.

The ideas we present in this article are based on studies of teamwork, and also on our experience observing, evaluating and contrasting teams over the years, at such places as Blue Flag at Hurlburt Field, Florida, the AEGIS Combat Information Center at the Combat System Engineering Development Site (CSEDS), Moorestown, New Jersey, corps–level exercises at the US Army War College (AWC), corps and division exercises at the US Army Command and General Staff College (USACGSC), echelons above corps at the National Defense University (NDU) and brigade and battalion exercises at Fort Hood, Texas; Fort Stewart, Georgia; and the National Training Center, Fort Irwin, California.[2] We have studied and provided training to logistics teams at the Air Force Institute of Technology, Wright–Patterson Air Force Base, Ohio; helicopter teams at Fort Campbell, Kentucky; and commercial aviation crews at NASA Ames Research Center, Moffett Field, California. We have observed top–level command meetings during actual, large–scale forest fires in Idaho.

Myths about Decision Training

Over the years, a number of ideas about team decision training have evolved that seem erroneous to us, and may actually get in the way of effective training and development. Para-

phrasing what humorist Will Rogers said a half–century ago, it's not what you do not know that will get you into trouble, it's what you know that isn't true.

In presenting the following myths about team decision training, we acknowledge that there are many fine instructors and course supervisors in the Armed Forces, and that they have impressive amounts of operational experience, both in working with teams under stress and in training teams to perform difficult missions. We do not take this experience lightly. In each observation conducted, we have tried to gather some tricks of the trade from the outstanding instructors to codify and provide to the instructors who are not well prepared to conduct effective team training. Unfortunately, the ill–prepared instructors appear to make up a sizable proportion of the staff at many organizations; they constitute the basis for the five myths below:

- Exercises already provide the necessary team training.
- Course instructors and supervisors already know how to train teams.
- The topic of team training is so confused that the training professionals still have not figured out what should be trained.
- Team decision training is expensive.
- If a team training program is introduced into an organization, it has to be highly streamlined, requiring little or no time to train instructors.

These myths alternately breed complacency that the system is working fine and needs no change, and hopelessness about whether meaningful change is possible. By countering each of these myths, we hope to provide a climate for progress.

Countermyth 1. Exercises often do not provide the necessary team training. Providing practice without useful feedback accomplishes little. It is like training marksmanship on a range without enabling the soldiers to determine whether they hit the target, or how close they came. Under such circumstances, training would not occur; sometimes the wrong behaviors could be trained. In the training community, there is a saying, "Practice makes permanent." Practice is not the same as training.

Our claim is that the great majority of team exercises do not attempt to train team processes. They do not identify critical processes to observe, evaluate and discuss via feedback. They are centered around the content of performance and decisions and ignore the way the decisions are reached. As a result, it is possible for the teams to develop poor habits, suited to the artificial world of the exercise but dysfunctional in an operational setting.

Over the years, a number of ideas about team decision training have evolved that seem erroneous to us, and may actually get in the way of effective training and development. Paraphrasing what humorist Will Rogers said a half–century ago, it's not what you do not know that will get you into trouble, it's what you know that isn't true.

Countermyth 2. Course instructors and supervisors generally do not understand team training requirements and rarely train team processes. Instructors often admit they are not prepared to give feedback about team processes or even to introduce discussions about the nature of team decision making. We have also heard officers make the opposite assertion, like the Navy captain who insisted that he trained teams, did a careful job and had little need for help in this area. When the captain was questioned by training professionals, it became clear that he put teams in exercises, and evaluated them on the basis of overall performance. He did not define team processes that were necessary, and he did not set these processes up as objectives to be monitored and evaluated. In short, he was not providing team decision training, and he was not aware of what was left out of his program.

Training has a general structure—identify the requirement; structure the medium for providing experience such as lecture and exercise; observe the target behaviors; evaluate the adequacy of

Team identity ***refers to the way individuals in an effective team have learned to view themselves as part of a team, rather than just doing a job that involves other people.*** **Team conceptual level** ***refers to the way the team thinks about a decision—the sophistication of ideas and the range of different factors considered.*** **Team self-monitoring** ***refers to the team's ability to analyze its own thinking—to monitor itself . . . and make the necessary adjustments.***

the performance; and provide feedback. Team decision training fits into this framework. In our experience, we have rarely seen instructors and supervisors set forth team decision skills as training objectives. We have seldom seen trainers monitor and provide feedback about these skills. When questioned, most trainers would not spontaneously describe these skills as training objectives, and they do not appear to notice the omission of team decision training. As a result, we rarely see the occurrence of team decision training, either in military exercises or at other points in the training program. This opinion is shared by many professionals in the area.

When we have presented these claims to instructors in military organizations, the first reaction is usually skepticism, since the instructors have far more experience conducting exercises for individuals and teams than we do, but when we explain what we mean by team decision training, the skepticism disappears and is replaced by frustration. The same instructors who start out claiming that they know all they need about team decision training complain that they are unprepared to observe and provide feedback about team processes, and that their organization needs to train them as instructors to do the training we have described.

Countermyth 3. There is strong agreement among training professionals about team decision training requirements. In the last few years, a number of frameworks have been presented that describe team decision processes.[7] There is a high degree of overlap among the specific behaviors identified by each of these researchers. Different projects and programs vary in the particular behaviors and team aspects they include. Nevertheless, the key features of a training program are well known.

Countermyth 4. Team decision training can be an inexpensive add-on to existing exercises. The primary ingredients for team decision training are already in place throughout the military—a range of exercises involving teams with experienced observers present.

These exercises are used to train teams in how to accomplish tasks together. They can also be used to train teams in adopting better processes. We should be able to leverage the same exercises to provide several objectives. In an age of tightening budgets, it becomes essential to make multiple uses of the same opportunities. There will be some increased costs, as described below, but these are not significant.

Countermyth 5. It is a mistake to go too far streamlining team decision training. In our initial work, we tried to make team training as minimal as possible. We sought approaches that required few feedback sessions and minimal training. That was a mistake. In streamlining the team training, we were minimizing the training itself. It made no sense to provide a single feedback session at the end of the exercise—there was no longer any chance for the team to use the feedback to change their approach and practice a more effective process. Feedback needed to start as quickly as possible and continue throughout the exercise so that new behaviors could be learned and practiced.

Similarly, our attempt to minimize instructor training was a mistake, since instructors complained that they were not prepared to do a good job of monitoring and coaching the teams. The instructors themselves have demanded workshops and guidance in observing teams and developing techniques for presenting reactions to team processes.

A Developmental Model

It is difficult to keep track of all the different aspects of team decision making. These include cooperation, leadership, coordination, shared mental models, and so on. Certainly, all of these

Training has a general structure—identify the requirement; structure the medium for providing experience such as lecture and exercise; observe the target behaviors; evaluate the adequacy of the performance; and provide feedback. Team decision training fits into this framework. In our experience, we . . . have seldom seen trainers monitor and provide feedback about these skills. When questioned, most trainers would not spontaneously describe these skills as training objectives, and they do not appear to notice [their] omission.

aspects are important, but for the practical task of training, it is unwieldy to work with such a large set of factors. Moreover, these topics are sufficiently vague that observers will have difficulty determining whether a specific behavior, such as one team member fails to inform another of an important event, is a case of inadequate communication, coordination, information management, shared mental model, anticipation, and so on. In short, if we want to improve team decision making, we must find a clear, straightforward and relatively unambiguous framework.

We have derived a model for teams that is based on their parallel to individual decision makers. It is called *Advanced Team Decision Making: A Developmental Model*.[4] The model views teams and groups as intelligent entities—they try to understand events; they try to use experience to draw inferences. They try to solve problems and make decisions.

There are three primary components of the model: team identity, team conceptual level and team self-monitoring. *Team identity* refers to the way individuals in an effective team have learned to view themselves as part of a team, rather than just doing a job that involves other people. *Team conceptual level* refers to the way the team thinks about a decision—the sophistication of ideas and the range of different factors considered. *Team self-monitoring* refers to the team's ability to analyze its own thinking—to monitor itself in action to determine where it may be having trouble and make the necessary adjustments.

In entry-level teams, the members are often out for themselves, and as a result, they compete about ideas rather than try to make sure the team is taking a thoughtful approach to the task. Because the members are unaware of how they are working as a team, they cannot monitor themselves because they do not know what they

should be doing. As a result, they do not have a way to strengthen their identity with the success of the team (rather than their ability to perform their individual jobs) or to see how important it is for the whole team to become more

Some teams have trouble with the sense of identity and may never form it. The members take the attitude "Just tell me what to do, and do not bother me with the rest." In contrast, teams that developed a strong sense of identity are composed of members who are thinking about the overall task.

sophisticated in its approach (rather than for the members to win debating points). People on these types of entry-level teams often feel frustrated. They know something is going wrong, but they are not sure what it is. We have focused on the three functions of team identity, conceptual level and self-monitoring to try to help team members learn where to look.

Each of these three components shows a clear development when we contrast effective and ineffective teams. Some teams have trouble with the sense of identity and may never form it. The members take the attitude "Just tell me what to do, and do not bother me with the rest." In contrast, teams that developed a strong sense of identity are composed of members who are thinking about the overall task. Driskell and Salas have studied teams in which the members were egocentric, versus teams whose members identified with the overall task facing all of them, and found that the latter showed much higher levels of performance.[5]

Teams also need to develop their conceptual level. It is a sign of ineffective teams that they either try to oversimplify everything to get the job done, or they drown in complexity that they do not know how to handle. In contrast, the strongest groups and teams we have watched have deliberately worked to make sure that different ideas and perspectives were presented and the experience of the different members was brought to bear.

Teams must work to develop the process of self-monitoring. Many novice teams just plunge into a task and hope to get it finished before time runs out. They do not have the ability to think about how they are working as a team. Effective teams can gauge the team's progress in order to judge if the strategy is working.

Applying the Model to Training

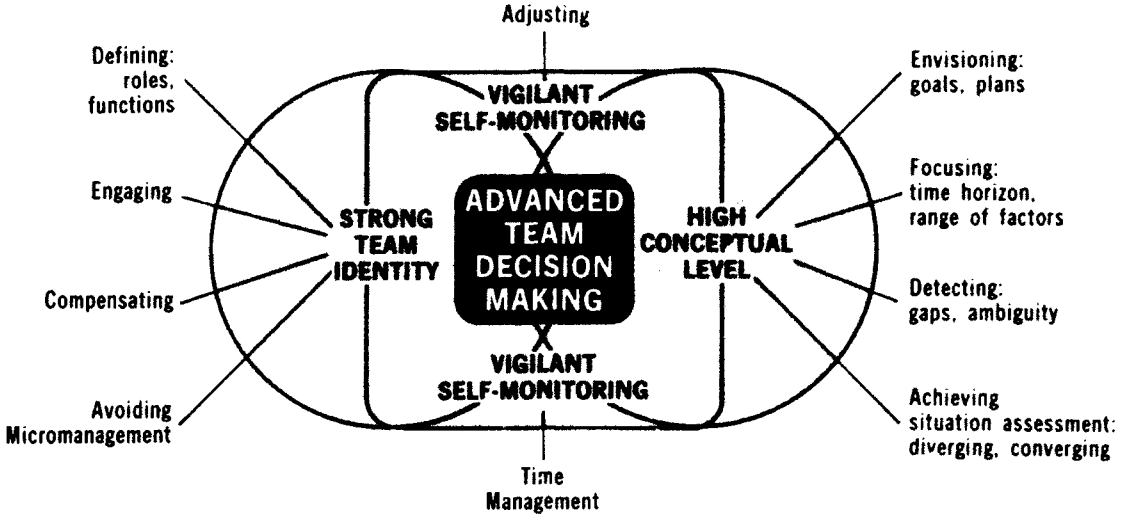
Our basic goal is to help teams become effective very quickly. Many teams are not together very long, and do not have much time to come up to speed. That means the members have to be effective team decision makers before they join the team. The only way for that to happen is for them to learn the necessary team skills beforehand—through team training and prior experiences with a range of team types. That means we need to consider all training exercises as opportunities for teaching team decision-making skills.

The most important step is to teach people how to observe teams in action. Instructors need to be able to observe teams, in order to present feedback. The team members must also learn how to be observers, so they can make improvements in team performance without having any instructors looking over their shoulders.

How do you teach people to observe the process of team decision making? It is not enough to lecture on teamwork. In order to have an effect, military personnel must be able to observe effective and ineffective behaviors during exercises, and to try out new strategies.

The developmental model of team decision making is just a starting point for looking at teams. It has to be filled out, with specific behaviors to watch for. There cannot be too many behaviors, or the task gets too difficult. The behaviors cannot be too general such as coordination or they will be hard to spot; they cannot be too specific (subordinate confirms messages received from the leader) or they become trivial. We have used our experience at the NDU, the AWC, the USACGSC and at many other settings, to identify the issues that arise most frequently. We have tried to draw on the suggestions we have been given, the lessons learned that we have been told about, as well as our own observations. Figure 1 presents a set of 10 behavioral markers that we

Key Behaviors for Advanced Team Decision Making



have most often heard and seen with command and control decision making. These markers were selected to be easily learned and used, to be powerful for showing what a team is doing and to be effective for helping a team to improve.

For team identity, there are four markers: defining roles and functions, engaging, compensating and avoiding micromanagement. Teams with a strong identity show all four types of behaviors.

Defining roles and functions. Whether the team is careful to let all members know their own jobs and functions, as well as the roles and functions of others. This sounds simple enough, but we have seen too many cases where people get confused midway through a task about who is supposed to do what.

Engaging. Whether team members are paying attention to the task and are involved in their functions. This may seem trivial, but in most planning teams we have observed, at least one member will simply tune out.

Compensating. Whether anyone notices that team members are becoming overloaded, or for other reasons are having trouble getting a task done, and steps in to help.

Avoiding micromanagement. Whether the leader stays at his or her job during crises rather than taking over for subordinates.

For team conceptual level, there are four markers: envisioning goals and plans, focusing on time horizon and range of factors, detecting gaps and ambiguity and achieving situation assessment by diverging and converging.

Envisioning goals and plans. Whether the team tries to help its members understand what the team is trying to accomplish. In the Army, this is the function of the commander's intent statement.

Focusing. Whether the team is perceiving the appropriate features of the task. One type of focusing is on the time horizon. Many ineffective teams concentrate on immediate events, and no one looks at the long-range consequences or implications. Alternately, teams can focus so intently on the future that they fail to recognize immediate threats that can shut them down if they are not attended to. The other type of focusing is on the range of factors considered. Some teams fixate on a single perspective, whereas others are able to use and combine multiple perspectives.

Detecting gaps and ambiguity. Whether the team is able to notice that it does not have a complete picture or that there is incongruent information.

Seeking divergence and convergence of situation assessment. Whether the team encourages different opinions and then converges on a commonly understood assessment. Effective teams are more likely to take the time to coordinate everyone's understanding of the

Many teams are not together very long, and do not have much time to come up to speed. That means the members have to be effective team decision makers before they join the team. The only way for that to happen is for them to learn the necessary team skills beforehand—through team training and prior experiences.

accepted assessment, sometimes using a map or other visual aid.

For self–monitoring, there are two markers: adjusting and managing time. Both of these depend on the team's ability to keep track of its progress and success.

Adjusting. Whether the team is able to make necessary changes. Self–monitoring concerns all the other behaviors. That is what the team "adjusts" on.

Managing time. Whether the team is keeping track of the progress it makes. This is one of the easiest behaviors to observe. Ineffective teams may not set out a schedule or develop a sense of milestones, or they may ignore these milestones. The result is usually a "final flurry" of activity to get everything finished, usually by compromising quality. The effective teams know when to cut off discussions, or set up parallel efforts to conserve time.

The following factors must be considered in order to improve our current training programs and trainers.

- Team exercises do not necessarily provide team training.
- Instructors must learn how to train teamwork skills.
- Team decision training can be an add–on to existing exercises.
- The development of team decision skills can be reliably assessed.
- Participants can be taught to monitor their own teams in action, in order to make critical adjustments.
- Teampower is important and it can be developed.

At this point, we hope the reader will be able to look at teams differently, whether as an observer or a participant. Features of team dynamics that might have gone unnoticed should now stand out more clearly. The use of a team to address a task is a large investment in time and effort. The misuse of teams, including inefficiencies and wasted efforts, is a problem that can be addressed. People who know how to observe teams in action, and how to help teams evolve to greater effectiveness, can serve an important function in military organizations. ***MR***

NOTES

1. For a discussion of individual decision making in operational settings, see Gary A. Klein, "Strategies of Decision Making," *Military Review* (May 1989) 56–64.

2. Caroline E. Zsambok, Gary E. Klein, M. M. Kyne and D. W. Klinger, (1992). *Advanced Team Decision Making: A Developmental Model* (Fairborn OH: Klein Associates Inc). Prepared by Klein Associates for the US Army Research Institute for the Behavioral and Social Sciences.

3. Examples are the work of J. A. Cannon–Bowers, E. Salas and S. Converse, (in press). Shared mental models in expert team decision making in N. J. Castellan Jr. (Ed.), *Current Issues in Individual and Group Decision Making* (Hillsdale, NJ: Lawrence Erlbaum for the US Navy); R. W. Swezey and E. Salas, *Teams: Their Training and Performance* (Norwood, NJ: Ablex Publishing Corp, 1992).

4. *Advanced Team Decision Making: A Developmental Model*

5. J. Driskell and E. Salas, (in press). Collective behavior and team performance. *Human Factors Society*.

Gary A. Klein is the chairman and chief scientist of Klein Associates Inc., a research and development company that performs work in applied cognitive psychology. Previously, he was a research psychologist with the Air Force Human Resources Laboratory and an assistant professor at Oakland University. He received a B.A. from the City College of New York, and an M.S. and a Ph.D. from the University of Pittsburgh. His article, "Strategies of Decision Making" was published in Military Review, *May 1989.*

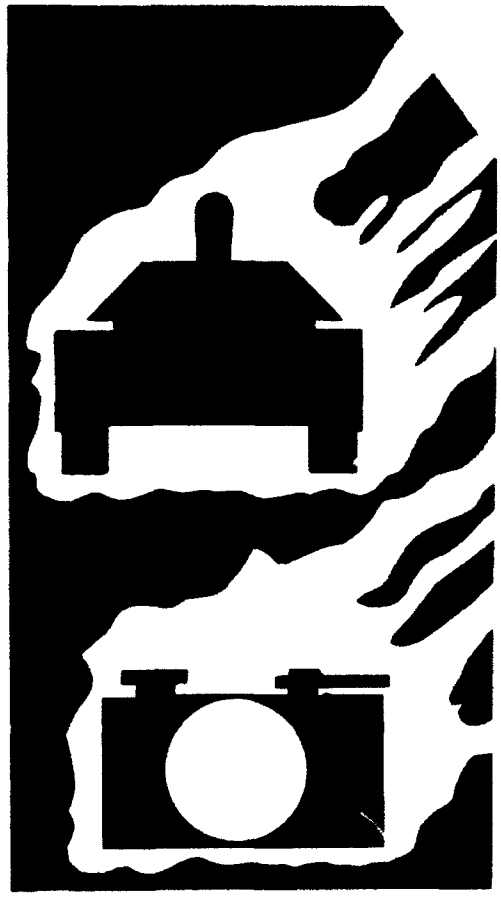
Caroline E. Zsambok is a senior research associate with Klein Associates Inc. Previously, she was an adjunct assistant professor at Miami University. She received a B.A. from Wright State University and an M.A. and Ph.D. from Miami University.

Marvin L. Thordsen is a research associate at Klein Associates Inc. He received a B.S. from Wright State University, where he is currently an M.S. candidate.

Avoiding a Military-Media War in the Next Armed Conflict

Lieutenant Colonel Richard F. Machamer Jr., US Army

This article's purpose is to contribute to the overall effort in preparing for the "next" conflict by presenting problems the military and the Fourth Estate have expressed since the war ended and providing some corrective recommendations. Many of these issues require immediate attention. Since this article was written in the fall of 1991, the Department of Defense and Army policies and procedures dealing with the media during combat have been studied, and some have been revised. The author, in fairness to both sides, includes an update where applicable.



MANY REPORTS from government and civilian agencies indicate the military public affairs (PA) operations during the Gulf War mirrored the success of the execution of the operational and tactical operations. Colonel William Mulvey, director of the US Army Joint Information Bureau (JIB) in Dhahran, Saudi Arabia, during the war, told an Air Force public affairs graduating class of "the greatest hands-on application of media relations ever."[1] The administration and the Pentagon consider the PA strategy a "model for the future."[2]

Civilian public relations professionals have acknowledged the military's successful communications strategies which fostered and sustained public support for the war. They consider the various techniques used by the military to be applicable to their civilian practices.[3] However, others have not been as generous with their praise.

Representative Bruce Vento (Democrat, Minnesota) wrote to Secretary of Defense Richard B. Cheney on 23 January 1991 and stated, "We cannot tolerate the Pentagon dictating the words and images the public is allowed to receive . . . . If this dangerous PR [public relations] campaign is not stopped, truth could end up as another casualty of the Persian Gulf war."[4]

The American Society of Newspaper Editors and the Radio-Television News Directors Association sent Cheney a statement of principles on war coverage. These tenets were based on the organization's assessment of media coverage during the Gulf War (see Statement of Principles). They concluded that "The Pentagon's

decision in this war to provide controlled, disciplined, directed coverage of the war, backed up by controlled access to the battlefield, rather than allow full movement and access, was, in our view, a bad one."

The press has criticized its own performance during the war. The same organizations that wrote Cheney scheduled a meeting in Washington, D.C. in the fall of 1991. They had two proposed agenda items. The first is to learn how they may be better prepared to cover military operations, which include training, pool procedures, new technology and transmission of copy and video. The second is to discuss the military and press procedures they developed with emphasis on ensuring their principles will be followed.

[The meeting between the media and DOD representatives did occur. Nine DOD principles concerning media coverage resulted and are addressed in DOD Directive 5122.5, Enclosure 3, "*Statement of DOD Principles for News Coverage of DOD Operations*." Soon to be released FM 100–5, *Operations*, stresses the media's impact on military operations. FM 46–1, *Public Affairs*, is now being revised.]

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On the military side, secretary of defense spokesman Pete Williams conducted after–action reviews with military PA officers (PAOs) from all services to identify problems and propose solutions to the military and media coverage of the war.

The amount of information demanded by the public during the Gulf War was, for the most part, limited. After General Colin L. Powell's "trust me" press briefing on 23 January 1991, the public appeared satisfied the war was being executed in the manner promised by President George Bush. A number of national polls showed the majority of Americans favored the restrictions applied to the press. They were content to hear the news of the war from the military briefers.

This circumstance may not apply in the next war. Unlike Grenada, Panama and Iraq, factors such as a higher number of casualties over a longer period of war can cause public confidence to decline, thereby resulting in demands for information from sources outside the military. Current Army PA planning needs to take this contingency into account.

As the editorial in the July 1991 issue of *Military Review* stated, "Someday, when things have not gone as well as they did in the Gulf War, our efforts now to improve the media–military relationship may be the only thing that will allow the Army's story to be told at all."

Press and Military Attitudes

An armor battalion commander's guidance to his soldiers during the Gulf War suggested tankers should "button–up" in their vehicles when any reporter approached.

A senior Air Force officer began a press briefing in January with, "Let me say up front that I don't like the press. Your presence here

can't possibly do me any good, and it can hurt me and my people. That's just so we know where we stand with each other."[5] These attitudes of the military toward the press have been around for some time. The fact that they still exist is somewhat understandable. For the past 20 years, the press has concentrated not on lauding the military's accomplishments as much as criticizing its shortcomings. However, the Gulf War showed a change in the press from 20 years ago.

Unlike Vietnam, the press separated the policy makers from the executors of the policy. Those who criticized the administration's decision to wage war with Iraq, in turn, lauded the soldiers who executed the decision.

Henry Allen of the *Washington Post* wrote: "The Persian Gulf press meetings are making reporters look like fools, nitpickers and egomaniacs: like dilettantes who have spent exactly none of their lives on the end of a gun or even a shovel; dinner party commanders, slouching inquisitors, collegiate spitball artists; people who have never been in a fistfight much less combat; a whining, self–righteous, upper middle class mob . . . .

"They ask the same questions over and over. In their frustration, they ask questions that no one could answer; that anyone could answer; that no one should answer."[6]

Military [hostility] toward the press [has] been around for some time. The fact that they still exist is somewhat understandable. For the past 20 years, the press has concentrated not on lauding the military's accomplishments as much as criticizing its shortcomings. However, the Gulf War showed a change in the press from 20 years ago.

Statement of Principles

We believe these are the principles that should govern future arrangements for news coverage of the United States military in combat:

1. Independent reporting will be the principal means of coverage of US military operations.

2. The use of pools should be limited to the kind envisioned by the Sidle Panel. Pools are meant to bring a representative group of journalists along with the first elements of any major US military operation. These pools should last no longer than the very first stages of a deployment—the initial 24 to 36 hours—and should be disbanded rapidly in favor of independent coverage. Pools are not to serve as the standard means of covering U'S forces.

3. Some pools may be appropriate for events or in places where open coverage is physically impossible. But the existence of such special–purpose pools will not cancel the principle of independent coverage. If a news organization is able to cover pooled events independently, they may do so.

4. Journalists in a combat zone will be credentialed by the US military and will be required to abide by a clear set of military security guidelines that protect US forces and their operations. Violations of the guidelines can result in suspension of credentials or revocation of credentials and expulsion from the combat zone.

5. Journalists will be provided access to all major military units.

6. Military PAOs should act as liaisons but should not interfere with the reporting process.

7. News material—words and pictures—will not be subject to prior military security review.

8. The military will be responsible for the transportation of press pools. Field commanders should be instructed to permit journalists to ride on military vehicles and aircraft whenever feasible.

9. The military will supply PAOs with timely, secure, compatible transmission facilities for pool material and will make these facilities available whenever possible for filing independent coverage. In cases where government facilities are unavailable, journalists will, as always, file by any other means available and will not be prevented from doing so. The military will not ban communications systems operated by news organizations.

10. These principles will also apply as well to the operations of the standing DOD National Media Pool system.

Media pool members covering a map orientation briefing at a USCENTCOM exercise.

Planning the number of reporters allowed to cover a unit or headquarters should be based on the first consideration in planning all military operations—the mission. A commander can accommodate more reporters during the preparation stage of a defend or prep to attack mission than during the execution of those missions.

Bill Monroe, editor of *Washington Journalism Review*, attributed the reporters' attitudes to "their own Vietnam syndrome—a sense of superiority and righteousness toward the military." Monroe challenges journalists, himself included, to rethink their feelings toward the military. "A good place to start," he says, "may be to recognize that the Schwarzkopfs and Powells are not aberrations—they are symbols of a persuasive excellence and esprit among men and women in uniform, qualities that journalists, like any Americans, have reason to be grateful for."[7]

The majority of reports on the execution of the war were favorable. To assume the PA policies during the Gulf War were primarily responsible for favorable coverage and therefore should be the model for the future is dangerous. A short war, smartly executed, with few American casualties contributed significantly to favorable coverage. The next war may not have the same characteristics.

The military currently has a distinct advantage in generating public support. According to Allen, the military is closer to middle America in values and ethical standards than journalists.[8] We must capitalize on this advantage and move beyond the attitudes of the last 20 years. If we do not, then as Mulvey says, "When commanders

fail to respond to the media, the field is left open to the critics of the armed forces. Then, speculation and misleading stories abound."[9]

[Further accounts from the Gulf War seem to indicate the Army is more paranoid about "bad" news than others. A senior Army PAO recently confided that had it been an Army color guard that presented the Canadian flag upside down during the World Series, we would still likely be answering internal reviews.]

Press Pools versus Independent Reporting

Press pools were discussed by the Sidle Panel in 1984. The panel was charged to determine how to best allow news coverage of war without jeopardizing operations security.

The pool system provided a means to limit the number of journalists that could be readily transported and equipped by military assets during the initial preparatory stages of armed operations. The panel recommended that "planning should provide for the largest press pool that is practical and minimize the length of time the pool will be necessary before 'full coverage' is feasible."[10]

Press pools were discussed by the Sidle Panel in 1984. The panel was charged to determine how to best allow news coverage of war without jeopardizing operations security. The pool system provided a means to limit the number of journalists that could be readily transported and equipped by military assets during the initial preparatory stages of armed operations.

The Gulf War produced up to 1,400 journalists and their support personnel to cover the operation. Full coverage is not feasible with that amount of people sent to cover a war. It is not a matter of not trusting journalists to roam freely throughout the commander's area; it is a matter of command and control.

A commander holds the responsibility for all personnel and all that happens, or fails to happen, within his or her area of operation which is specifically identified by established boundaries. Personnel include soldiers, the enemy, civilian refugees and yes, journalists. The commander does not have the time or the assets to execute that responsibility when inundated with an unlimited number of reporters.

Richard Harwood of the *Washington Post* suggested, "The war could have been reported with great skill and thoroughness, and the public interest could have been properly served, if the task had been given to the 20 or so major news organizations that normally provide 99 percent of the international news." [11]

Whether the highly competitive media organizations as a whole will adopt such a proposal is yet to be determined. News organizations, if they so desire, will have to resolve those issues of fairness. At issue for the military is serving the public interest.

PA planners should assume an overwhelming number of journalists will be present to cover the next war. A system that assigns reporters at levels below the JIB is essential.

Planning the number of reporters allowed to cover a unit or headquarters should be based on the first consideration in planning all military operations—the mission. A commander can accommodate more reporters during the preparation stage of a defend or prep to attack mission than during the execution of those missions.

Ed Needham of ABC News in Vietnam, August 1966.

Critics will say that varying the number of reporters in a unit area with the mission can provide the enemy additional intelligence. This is a valid point, especially if reporters do not wear military uniforms. Journalists totally integrated with the force will negate the risk of compromising the mission.

Considering that operational plans are developed days in advance, the PA staff should be able to plan the number of reporters allocated for coverage at the individual unit level, provided they are included in the operational planning as was recommended by the Sidle Panel.

As an example, during the preparatory phases in January and February 1991, the 1st Infantry Division (ID) had four pool reporters assigned by the JIB. Four days prior to the start of the ground offensive, five additional journalists, with television equipment, unexpectedly arrived at the division, also assigned by the JIB.

Doubling the number of reporters in a unit shortly before an offensive action, without allowing sufficient time to plan for their arrival, certainly does not aid the commander's PA endeavors.

One of the challenges confronting commanders is *where* to put reporters in their area. During an offensive or defensive operation, one of only two secure places on the forward edge of the battle area is within an armored fighting vehicle. (A properly reinforced foxhole is also secure; however, the fluidity of the AirLand battlefield can require occupants of a foxhole to move quickly under combat conditions into an armored fighting vehicle.) Each vehicle has an

established crew; each crew member performs a specific combat function. Replacing a crew member with a reporter eliminates a combat multiplier and reduces combat effectiveness. That is unacceptable to most commanders—and rightfully so. In a preparatory phase, this problem of where reporters locate is somewhat reduced. A unit can accommodate additional reporters during this phase.

Critics will say that varying the number of reporters in a unit area with the mission can provide the enemy additional intelligence. This is a valid point, especially if reporters do not wear military uniforms. Journalists totally integrated with the force will negate the risk of compromising the mission.

One battalion allowed a reporter to ride with a company first sergeant who operates from a high mobility multipurpose wheeled vehicle (HMMWV). A first sergeant normally does not fight with the forward units; however, he is close enough to the action to allow the reporter the access he needs to cover the war at the unit level. In this situation, the first sergeant becomes the media escort. Escorts are another issue discussed later.

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Level of Desired Coverage

Journalists who desire to cover "the front" must be aware of the advantages and disadvantages that entails. Writing stories at the small–unit level provides a more personal, "Bill Mauldin" and "Ernie Pyle," account of combat. In doing so, however, the journalist is cut off from the "big picture" of the war and has added hurdles in getting his or her story to the JIB.

A reporter from the *Washington Times* with the 1st ID wanted to cover the war where the action was, at the battalion and company levels. He returned to the division headquarters after 24 hours, uncomfortable because he was not able to report the total picture of the war.[12]

The news media organizations need to provide input to the JIB as to what they want their reporters to cover. Where they are assigned will depend on that information and will allow better, more efficient planning at the JIB.

The Issue of Security Reviews versus Censorship

The press has claimed reports were altered by military censors. A journalist's description of the F–117A as a "fighter bomber" was changed to "fighter." Another reporter's description of pilots returning from missions was changed from "giddy" to "proud."[13]

This may have happened, but it was the exception, not the rule. And as an editor stated: "What does this all add up to? A sanitized objective, an altered airplane description . . . . Not exactly the Pentagon Papers."[14] The military provided the media with 12 ground rules, which specified information that should not be reported because its publication or broadcast could jeopardize operations and endanger lives (See Ground Rules).

For security reasons military PA personnel reviewed all stories and tapes prior to release. These PAOs were not authorized to independently alter a report. The conduct of these security reviews is best illustrated by the 1st ID's procedures.

At daybreak, reporters assigned to the 1st ID were escorted to cover a unit or event. At a specified time and place during the afternoon, reporters and escorts would meet the division's PAO.

News coverage of past wars, including the Gulf War, has sometimes violated ground rules, intentionally or unintentionally, which resulted in compromised operational and tactical security. Security reviews are a necessity. The systems used by the military during the Gulf War allowed reviews for security while maintaining the public's right to know.

According to the PAO, Major Bill McCormick, he would review the copy with respect to the ground rules. If he determined that any portion of the report violated the rules, he would discuss it with the journalist. If they could not agree, McCormick would "flag" the questionable portion by indicating in the margin, by number, which ground rule he felt was violated. He would not, and could not, alter the report.

The plan called for a courier to meet them and transport the reports to the JIB, where they were reviewed by joint PAOs and media press pool representatives. If agreements on any "flagged" stories could not be made, the flagged portion of the story was sent to the Office of the Chief of Public Affairs for final resolution with the reporter's editors.

During four months of operation in Saudi Arabia and Iraq, only one news piece from the 1st ID was sent to Washington, D.C.

At a Public Relations Society of America luncheon in New York, Lieutenant Colonel Larry Icenogle, press pool supervisor, stressed there was not any censorship in the Gulf, there were security reviews.[15]

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[DOD Directive 5122.5 makes no mention of security reviews or censorship, field or otherwise. Guideline 4 states "Journalists . . . will be required to abide by a clear set of military security ground rules that protect US forces and their operations."]

Escorting the Media

Escorting reporters on the battlefield was a PA function during the war. Journalists, in general, are not keen on being escorted. The press complained PAO escorts were intimidating.

Tom Giusto, ABC News producer and the US network coordinator in Dhahran said, "They [PAOs] would look over shoulders of reporters as they were doing interviews. They were an intimidation factor. No lower ranking enlisted person would criticize the military in the presence of a high ranking officer."[16] The letter to Cheney from the news organizations cited eight instances where journalists thought escort officers interfered with their reporting. The actual

number of PAOs who conducted their escorting duties in the manner described above is unknown. Not all did. For example, in the 1st ID, the reporter and interviewee were left alone completely.

PAOs who were overly concerned about what soldiers would say to reporters were likely portraying their boss's concerns. PAOs given a directive of "there will be no bad press" are forced to resort to techniques as described by Giusto.

That is unfortunate, because our soldiers deserve better credit. They should be allowed to comment freely on what they are doing within security restrictions. Undoubtedly, some negative comments will be made. A balanced reporting, however, will show the American public soldiers with a strong sense of duty and purpose.

Escorting is also a command and control issue and is mandatory. Escorts should accompany reporters to and from the location of the story. Once there, the need for escorts is unnecessary. Security reviews will correct any security violations in interviewee statements.

Ground Rules

The following information should not be reported, because its publication or broadcast could jeopardize operations and endanger lives:

1. For US or coalition units, specific numerical information on troop strength, aircraft, weapon systems, on–hand equipment, or supplies such as artillery, tanks, radars, missiles, trucks, water, including amounts of ammunition or fuel moved by support units or on hand in combat units. Unit size may be described in general terms such as "company–size," "multibattalion," "multidivision," "naval task force" and "carrier battle group." Number or amount of equipment and supplies may be described in general terms such as "large," "small," or "many."

2. Any information that reveals details of future plans, operations or strikes, including postponed or canceled operations.

3. Information, photography and imagery that would reveal the specific location of military forces or show the level of security at military installations or encampments. Locations may be described as follows: all Navy embark stories can identify the ship upon which embarked as a dateline and will state that the report is coming from the "Persian Gulf," "Red Sea," or "North Arabian Sea." Stories written in Saudi Arabia may be datelined, "Eastern Saudi Arabia," "Near the Kuwaiti border," and so on. For specific countries outside Saudi Arabia, stories will state that the report is coming from the Persian Gulf region unless that country has acknowledged its participation.

4. Rules of engagement details.

5. Information on intelligence collection activities, including targets, methods and results.

6. During an operation, specific information on friendly force troop movements, tactical deployments and dispositions that would jeopardize operational security and lives. This would include unit designations, names of operations and size of friendly forces involved, until released by US Central Command (USCENTCOM).

7. Identification of mission aircraft points of origin, other than as land or carrier based.

8. Information on the effectiveness or ineffectiveness of enemy camouflage, cover, deception, targeting, direct and indirect fire, intelligence collection or security measures.

9. Specific identifying information on missing or downed aircraft or ships while search and rescue operations are planned or under way.

10. Special operations forces' methods, unique equipment or tactics.

11. Specific operating methods and tactics, such as air operations angles of attack or speeds, or naval tactics and evasive maneuvers. General terms such as "low" or "fast" may be used.

12. Information on operational or support vulnerabilities that could be used against US forces, such as details of major battle damage or major personnel losses of specific US or coalition units, until that information no longer provides tactical advantage to the enemy and is, therefore, released by USCENTCOM. Damage and casualties may be described as "light," "moderate" or "heavy."

[Press pools and media escorts were not used during the initial stages of Operation *Restore Hope*. The television coverage of the US Marines landing at Mogadishu caused confusion and disrupted command and control for the small size elements performing the mission. The media's argument that this was a DOD-planned event, is irrelevant. The results of media personnel freely roaming the area of operation was evident the morning of the beach landing. DOD Guideline 6 states "Military public affairs officers should act as liaisons and should not interfere with the reporting process."]

One corps did not adhere to the original plan . . . [and] interjected its PA staff into the system, requiring security reviews at the corps headquarters . . . without the reporter or press pool representation. Although the corps claimed this did not add delays, undoubtedly it did and furthermore, the additional layer of security reviews did not contribute to favorable military and media relations. It was an unnecessary action that added burdens to an overtaxed system.

Delays

Icenogle admitted the military had delays in getting stories from the units to the JIB. He attributed that to difficult logistics and transportation problems. Reporters, he said, were located 500 miles from Dhahran in the middle of the desert, with no telephones, towns, villages, crossroads—nothing. The primary means of transporting stories and videos from the place of origin to the JIB was by courier, either wheeled or, when available, by helicopter. Robert Hall, deputy assistant Secretary of Defense for Information, acknowledged the courier system delayed transmission of stories.

Some units added more burdens. One corps did not adhere to the original plan of direct transmission of stories and videos from the place of origin back to the JIB. The corps interjected its PA staff into the system, requiring security reviews at the corps headquarters. This review was done by the corps PA staff without the reporter or press pool representation.[17]

Although the corps claimed this did not add delays, undoubtedly it did and furthermore, the additional layer of security reviews did not contribute to favorable military and media relations. It was an unnecessary action that added burdens to an overtaxed system.

In many cases, innovative PA soldiers showing initiative were able to improve the courier system. For example, the 1st ID, on occasion, was able to use the tactical facsimile in the division's tactical operation center. The 1st Marine Division's PAO linked a satellite tactical phone into a commercial hookup to transmit reporters' stories directly to the United States.

The equipment to rapidly transmit stories and videos is readily available. Who absorbs the procurement costs, such as the press or the military (or a combination of both), should be established now; and high-tech systems should be made available in the near future. As Hall stated: "Maybe it is time to move the Pentagon's PA function up from the Civil War era into the 1990s."[18]

Equipment

As a result of Operation *Desert Storm*, Army PA organizations have expressed a need for equipment such as filmless cameras that record images on magnetic disks, electronic bulletin boards,

Reporters interviewing military personnel after the liberation of Kuwait City, February 1991.

scanners, MSQ–85 portable facsimile machines and portable photo–processing labs.

Important to note is the 1st ID PAO did not have his own tactical frequency modulation (FM) radio. A radio for an Army division PA office is not authorized by the modified table of organization and equipment (MTOE) nor was one furnished, in the 1st ID, to the PAO in combat.

This, in effect, totally cut off the PAO and reporters from the division's operation during the offensive phases of the ground war. The PAO could rely on other division staffs' radios; however, this access was possible only during static operations. From the second day of the ground war to its completion, the PA staff and reporters resorted to traveling in a convoy for three days without a clue as to what was going on with forward units. On one occasion, a reporter and his escort left the convoy in an attempt to locate forward units. They were lost for three days.

This problem is an easy fix and requires an immediate solution. In order to do their job of maintaining the public's right to know, PAOs must have contact with the force.

Reporters assigned to divisions by the JIB arrived at the division headquarters missing critical life support systems such as chemical protection gear and cold weather clothing items. This places another unnecessary burden on PAOs to "scrounge" the needed equipment from divisional units, which are not amenable to requests for critical equipment items for others outside the organization.

The planning and execution responsibilities to supply reporters with necessary equipment should rest with the JIB. It has better

PAOs given a directive of "there will be no bad press" are forced to resort to [intimidation] techniques . . . Our soldiers deserve better credit. They should be allowed to comment freely on what they are doing within security restrictions. Undoubtedly, some negative comments will be made. . . . Escorts should accompany reporters to and from the location of the story. Once there, the need for escorts is unnecessary. Security reviews will correct any security violations in interviewee statements.

The planning and execution responsibilities to supply reporters with necessary equipment should rest with the JIB. It has better access to logistics stockpiles than the forward units. Granted, 1,400 reporters in theater can overtax the supply system; however, the JIB has control of determining the number of reporters assigned to units and can prioritize supply actions accordingly.

access to logistics stockpiles than the forward units. Granted, 1,400 reporters in theater can overtax the supply system; however, the JIB has control of determining the number of reporters assigned to units and can prioritize supply actions accordingly.

[The telegraph was the "high speed" advanced communication technology during the Civil War. I received a note scribbled on the back of an MRE (meal ready–to–eat) box from an Army Public Affairs Division commander who had recently deployed to Somalia, citing the postcard to be the best he could do at that time to communicate the division's story. The need for communication and tactical equipment has been sufficiently raised; however, authorization and procurement processes remain stagnant.]

Cheney reportedly said during the deployment of forces to Iraq, "If the media and therefore the public didn't feel they were getting the facts, there was no chance of maintaining public support."[19] Most of the facts in the Gulf War were provided to the public by the military. In this war, that concept worked and worked well. The majority of the public thought its interests and right to know were well served.

The inevitable recall to arms, however, may not result in as quick and victorious resolution as did operations in Grenada, Panama and Iraq. The Army PA concepts for future war need to be in place to avoid having the public think they are not getting the facts.

The public, and the media to some extent, are very supportive of the US Armed Forces, and rightfully so. The military should improve the information systems that need repair now in order to maintain this support when things do not go well. The American soldiers are deserving of and entitled to it. ***MR***

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Lieutenant Colonel Richard F. Machamer Jr. received a B.S. from the US Military Academy and an M.S. from Kansas State University, and he is a graduate of the US Army Command and General Staff College. He has served in a variety of command and staff positions.

IGs Old and New: Misunderstood Roles

Lieutenant Colonel Robert L. Maginnis, US Army

The role of the Army's inspector general (IG) is misunderstood by most personnel in the military. The author outlines the historical background of the IG and discusses its role in today's Army. Dispelling the myth that the IG is a spy for the commander, he discusses the IG as a trainer and a means of providing assistance to units and organizations.

THE ARMY'S historic inspector general (IG) system is threatened by those who do not understand or trust the military IG. Some members of the public and Congress espouse the cause of changed roles for the Army's IG. Specifically, they question the IG's objectivity at policing Army ranks. To resolve the perceived lack of objectivity, they want an Army IG system that mirrors the significantly different civilian cabinet-level IG.

Recent hearings on Capitol Hill questioned the IG's ability to police the Army objectively. The hearings cited reports of reprisals following whistle-blower complaints of IG mistakes. Additionally, skeptics point out the IG's institutionalized loyalty to the local commander. In their view, this relationship jeopardizes the IG's objectivity in cases where the command's reputation is at risk. IGs are also accused of delaying, obfuscating and even lying to protect their commands.

Some of the same hearings and news media reports also suggest a general lack of understanding of the Army IG system. This lack of understanding is evidenced when the Army IG is compared with the more visible and emergent statutory cabinet-level IG systems. The critics suggest the Army IG is not providing the "watchdog" service commonly associated with the cabinet-level IG systems. Such comparisons miss the point. The Army IG system is historically and functionally different from the recently established cabinet-level IG systems. They must not be confused.

The Army IG system should not change to reflect the cabinet department IG systems. Such a change would deprive the Army commander of an important and time-proven resource and jeopardize the concept of unity of command.

The following is a historical and functional explanation of the Army's IG system. It points out the system's unique attributes. It also highlights the functional differences between the Army and cabinet-level IG systems. While these systems are perhaps well-suited for their own agencies, they are a quite different sphere than the Army. Finally, the article provides recommendations suggesting how the Army might sustain the current and effective IG system and simultaneously provide the information and assurances required by Congress.

Historical Perspective

General George Washington determined that the Continental Army required an inspector general to help establish standards and discipline

the force. At the same time, the Continental Congress recognized the need for an inspector general to provide it with information concerning military affairs. This parallel IG requirement created tension between the military and the civilian authorities. Washington's preference for an IG answerable only to him prevailed. The tension created by a dual requirement for information continues even today.

American military IGs became the commander's agents to ensure the stern discipline necessary for the volley fire and massed bayonet tactics of the day. . . . Such strict training was expensive, requiring a significant public investment. Therefore, Congress understandably wanted an accounting of the military investments. It also wanted assurances that the military would remain subordinate to its authority.

The first modern military inspectors were two French "inspecteurs" appointed in 1668—an IG of infantry and an IG of cavalry. Louis XIV expanded this system by appointing additional IGs and dispersing them geographically. Their duties were to inspect the troops and report to the king; they were the king's agents in the army.

Military inspection soon became an essential aspect of all modern armies. American military IGs became the commander's agents to ensure the stern discipline necessary for the volley fire and massed bayonet tactics of the day. Additionally, such strict training was expensive, requiring a significant public investment. Therefore, Congress understandably wanted an accounting of the military investments. It also wanted assurances that the military would remain subordinate to its authority.

The organization and function of the US Army IG system has changed radically since the first IG over 200 years ago. For example, in 1813, the Army reorganized and established an IG department. These early IGs performed functions such as mustering and inspecting troops; selecting encampment sites; supervising the camp police; inspecting parades; and making semiannual reports to the War Department on the state of the Army.

During the Mexican War, the IG became the second in command or served as the chief of staff. IGs also served in all major commands during the American Civil War. However, the absence of an IG structure meant that their service was too often subject to improvisation. For example, the secretary of war employed some IGs as aides to serve him in roles ranging from messenger to confidential agent. Some IGs inspected contractor fraud. In some units IGs functioned as adjutants because they lacked the status to be completely effective. Some IGs did inspect units and submitted reports on the efficiency of the Army.

In 1876, the secretary of war directed the IG to report directly to the unit commanding general (CG). The IG subsequently came under the local CG's control for all matters. He was no longer a "spy" from a higher headquarters. This relationship continues today.

During the final quarter of the 19th century, IGs undertook special investigations, some for Congress. The IG also became the War Department's chief agent for safeguarding public property. He examined accounts and was the author of the Subsistence Department's sales list.

Through more than 200 years of service, the IG inspected, audited, investigated, trained and did much more, performing those duties necessary to sustain the Army and accomplish the mission.

The number of serving Army IGs also changed through the years. Washington had one IG at a time. The Army reorganized in 1813 with 25 inspectors. It began the Civil War with one IG and five assistants. The number of IGs grew considerably to include inspectors in all major commands. The Army reorganized in 1874, reducing the inspectorate to five officers. Congress provided for 17 Army IGs in 1901. During World War I, 215 officers served as IGs.

Iraqi civilians being searched for weapons at Checkpoint-Bravo near Basra, March 1991.

The IG's inspection role is especially important during wartime. The IG helps identify combat readiness deficiencies and recommends solutions; verifies deployability status and resolves soldier morale and welfare issues; and inspects refugee and prisoner of war treatment and may consider allegations of war crimes.

The Army reorganized again in 1920, with The Inspector General (TIG) and 61 officers in the IG Corps. With the outbreak of World War II, IG ranks swelled from 60 in 1939 to 1,449 in 1945. Today, the Army has more than 2,000 (officer, noncommissioned officer and Department of the Army [DA] civilian) IGs.

The statutory basis for the current IG system dates back to the 1950 Army Reorganization Act, which made TIG responsible to the Army chief of staff and responsive to the secretary of the Army. The reorganization charged TIG with inquiring into and reporting upon the discipline, efficiency and economy of the Army. Specifically, IGs focused their effort on training and combat readiness.

The statutory basis for federal-level IGs changed with the passage of the 1978 IG Act. This act created 12 statutory cabinet-level IG officers.[1] These officers are appointed by the president or by agency heads who themselves are appointed by the president. They are supposed to operate independent of their agencies to prevent and detect fraud, waste and abuse through audits and investigations. They are to keep the head of their agency and Congress fully and currently informed about agency problems and deficiencies. In sum, they are watchdogs for Congress concerning the performance of cabinet-level departments.

The 1978 IG Act did not create a Department of Defense (DOD) IG. However, in 1982, the original IG Act was amended to direct a study to determine the feasibility of creating an IG for the DOD.[2] Finally, the 1983 DOD Authorization Act created that office. The new DOD IG office is equivalent to the other cabinet-level IG offices and provides Congress with oversight of the uniformed services and their IG systems.

The statutory basis for the current IG system dates back to the 1950 Army Reorganization Act, which made TIG responsible to the Army chief of staff and responsive to the secretary of the Army. The reorganization charged TIG with inquiring into and reporting upon the discipline, efficiency and economy of the Army

The 1986 Goldwater–Nichols (DOD) Reorganization Act further changed the Army IG system by placing it under the direct auspices of the civilian secretary. TIG became responsible to the secretary of the Army and responsive to the Army chief of staff. TIG's other responsibilities remained the same.

The following contrasts the Army IG with its cabinet–level counterpart. Marked functional differences exist between the Army and other federal IG systems.

Different IG System

The modern Army IG is an extension of the eyes, ears, voice and conscience of the command. The IG is a personal staff officer providing the commander with a sounding board for sensitive issues and is typically a trusted agent in the command. The IG is an honest broker and a consummate fact finder, whose primary tools include training, inspecting, assisting and investigating.

The first effective American Army IG, Major General Friedrich Wilhelm von Steuben (a Prussian army veteran) was primarily a trainer. He taught Washington's soldiers to march, volley fire and fight with the bayonet. Probably von Steuben's most important contribution came in the form of establishing standards for tactics, organization, training and instilling discipline.

The modern Army IG is also a trainer, who joins the corps after serving as a line officer and brings to the corps a wealth of training experience. The IG employs that experience to help the commander uncover training problems and implement solutions. Additionally, the IG often becomes the commander's instrument for passing on lessons learned and assists the commander with setting training standards.

The Army IG has long been a readiness inspector. The IG trains to identify the origin of problems and then recommends solutions to help the commander correct deficiencies. The IG also verifies whether the corrective action taken was effective and complete and produced the desired results.

The IG's inspection role is especially important during wartime. The IG helps identify combat readiness deficiencies and recommends solutions; verifies deployability status and resolves soldier morale and welfare issues; and inspects refugee and prisoner of war treatment and may consider allegations of war crimes.

The modern IG also assists soldiers, DA civilians and their families with problems. Acting as an ombudsman, the IG corrects injustices to individuals and helps eliminate conditions that are detrimental to the Army community. This is done through networking with staffs and other IGs stationed around the world and through proactive leadership and tenacious staff work. The IG also processes DOD hotline cases relating to Army activities. Many of these cases address perceived or actual waste of government resources.

Finally, the IG investigates. In that critical role, the IG protects the credibility of the profession of arms by enforcing the Army's ethic of selfless service, duty, integrity and loyalty. The IG does this by investigating alleged infractions of the *Standards of Conduct for DA Personnel* (US Army Regulation [AR] 600–50) and *Operating Policies* (AR 600–20).

Allegations of impropriety concerning general officers, senior executive service personnel and select systemic issues are investigated by teams of IG investigators assigned to the US Army IG Agency. All other allegations of misconduct and topics of special command interest are investigated by the IG under the direction of the local commander.[3]

The federal department IG's functions are important and complex, but narrower. The cabinet–level IG primarily conducts audits and in-

The Army commander performs many tough tasks . . . [and] directs the IG to perform those services which best support the organization's mission. . . . The proposal to make the Army IG an independent agent answerable to Congress undermines the concept of the unity of command and defeats many of the current IG's functions. Making the IG part of a stovepipe organization is tantamount to placing a political officer in the ranks, such as in the former Soviet army. He would create suspicion and never gain the full trust of the commander.

vestigations. Those audits are typically based on issues of congressional interest and statutory requirements. The cabinet–level IG is especially sensitive to the interests of the applicable congressional oversight committee.

The statutory department IG primarily investigates allegations of waste, fraud and abuse and occasionally looks at allegations of impropriety concerning the standards of conduct. The federal department IG typically takes an oath, in some cases is armed and may have arrest powers. The cabinet–level IG agency, on occasion, contracts special investigation requirements with private nongovernment agencies.

The cabinet–level IG is not a trainer, seldom performs the assistance functions commonly associated with Army IGs and rarely performs special inspections.[4] These differences distinguish the Army IG from nonmilitary federal government IGs.

Another discriminator between the IG systems is the nature of the community served. Specifically, the uniformed Army is remarkably homogeneous and disciplined. The Army resocializes young men and women through a series of liminal processes that instill desirable professional values and the Army ethic.[5] These qualities are then reinforced by the Uniform Code of Military Justice (UCMJ) and a unique set of institutional standards, norms and social mores. Indeed, the military has long been recognized as "a specialized society separate from civilian society. . . The differences between the military and civilian communities result from the fact that it is the primary business of armies and navies to fight or be ready to

fight wars should the occasion arise."[6]

The community served by the federal department IG is very different. The federal department community differs because the departments offer few, if any, resocializing processes for employees; the department's missions are limited to a predictable environment. Therefore, the federal department's community better reflects the American society than does the separate and resocialized Army. Specifically, the cabinet-level departments employ people with norms and mores better reflective of a heterogeneous and transient work force living in widely dispersed communities. These people may not share a common ethical framework and may not choose to endorse the cabinet department's goals. This diversity complicates the federal department IG's job.

The modern Army IG is an extension of the eyes, ears, voice and conscience of the command. The IG is a personal staff officer providing the commander with a sounding board for sensitive issues and is typically a trusted agent in the command. The IG is an honest broker and a consummate fact finder, whose primary tools include training, inspecting, assisting and investigating.

Finally, the individual selected to serve as an Army IG also differs from his or her civilian counterpart in the cabinet-level IG system. The Army IG candidate typically has broad Army experience; is selected because of a demonstrated penchant for honest dealings with fellow soldiers; knows the organization (the Army) and how it works; is a proven subject matter expert in at least one military occupational specialty (MOS); and understands the functions of the chain of command, the importance of loyalty and the value of being objective. In sum, the Army IG is technically and professionally prepared to train, demonstrates the institutional values and possesses the key soldierly qualities.[7]

TIG sustains quality in the IG corps by personally screening the records of all prospective IGs, looking for soldiers of character with recent line unit experience. TIG also looks for men and women of integrity who are competitive in their specialties. Additionally, these IG candidates know IG duty is not a career track. They will serve one three-year tour and then return to line units.

The statutory IG, who may come from a position within the federal agency, is very different. However, coming from within the agency is not necessarily an IG requirement. Many of the senior IGs come from successful business careers. Their subordinates are often recruited from the ranks of police officers, private-sector auditors, and the like. They may well be expert investigators and auditors. Once hired, they may be assigned to decentralized field offices providing simultaneous stovepipe reports to senior political officials and members of Congress. Their special IG training and resocializing processes vary considerably. Additionally, the statutory IG works a relatively standard work week in contrast to the Army IG, who often works nights and weekends and frequently travels away from home station. The federal department IG also anticipates remaining in the IG job indefinitely and may even have an IG career track.

The aforementioned functional and professional differences demonstrate the uniqueness of the Army IG system and suggest why the federal department IG system is not a good model for the Army. Specifically, the Army IG performs services for the commander, during war and peacetime, which benefit a professional and decentralized organization with significant local autonomy.

The Army commander performs many tough tasks. The competitively selected commander directs the IG to perform those services which best support the organization's mission. These services include training, inspecting, assisting and investigating.

In summary, the proposal to make the Army IG an independent agent answerable to Con-

gress undermines the concept of the unity of command and defeats many of the current IG's functions. Making the IG part of a stovepipe organization is tantamount to placing a political officer in the ranks, such as in the former Soviet army. He would create suspicion and never gain the full trust of the commander. Such a change would also undermine unity of command. It would make a clear statement to the professional officer corps. Such a change communicates, "We [Congress] do not trust you [the professional officer corps]." This is the wrong approach to ensure accountability and information flow. Additionally, it would not guarantee objectivity or eliminate the prospects of obfuscation. It would undermine Army effectiveness and unity of command.

Recommendations

The Army must preserve its time–honored IG system and address the growing criticism by satisfactorily meeting the information and assurance needs of Congress. It must debunk the errant arguments of critics who contend the Army will not find itself guilty of wrongdoing. These skeptics accuse the IG of playing a complacent role and not pursuing sensitive and potentially embarrassing issues. Consider the following recommendations.

First, the Army can sustain congressional support of the current system and dispel or minimize suspicion by aggressively and consistently prosecuting, reporting and resolving allegations of improper conduct and cases of waste, fraud and abuse. It must also cautiously protect the confidentiality of whistle–blowers and aggressively address allegations of reprisal against those who complain to IGs. These efforts will sustain a measure of trust and credibility in Congress.

The Army should also retain the current system of rotating experienced line officers into IG positions. This process protects the IG system from a tendency to entrench and become too bureaucratic and self–serving. Additionally, the Army must sustain the IG training course, which ensures uniformity of procedure and philosophy. Finally, sustain the networking of IGs to guarantee accountability both horizontally to the local commander and procedurally to the IG at the next higher headquarters. These measures help the system guard against the loss of objectivity.

Allegations of impropriety concerning general officers, senior executive service personnel and select systemic issues are investigated by teams of IG investigators assigned to the US Army IG Agency. All other allegations of misconduct and topics of special command interest are investigated by the IG under the direction of the local commander.

Second, although the IG provides some oversight of Army activities, it is not the only Army agency performing a watchdog type role. The Army has many organizations that oversee and report organizational compliance with statutory standards. Specifically, the criminal investigation division (CID) investigates waste, fraud and abuse allegations.[8] Its investigations are reported to Congress.

The Army also participates in an elaborate set of checks and balances established by the Accounting and Auditing Act of 1950, which requires each executive agency to establish and maintain systems of accounting and internal control. This act was updated in 1982 by the Federal Manager's Financial Integrity Act, requiring that each executive agency's internal management controls comply with the Comptroller General's standards providing for reasonable assurances. These assurances are reported to the Congress.

The Army's Internal Management Control Program includes methods and procedures to reasonably assure that obligations and costs are in compliance with applicable law; funds, property and other assets are safeguarded against waste, loss, unauthorized use or misappropriation; and revenue and expenditures are

The DOD IG provides Congress with an in–house civilian watchdog agent. This organization conducts audits of the internal management of the DOD (and the Army), recommending ways to improve operations, enhance readiness and reduce costs. The DOD IG conduc.s criminal and noncriminal investigations, including procurement fraud and other white–collar crimes. Additionally, it maintains daily contact with the Army IG, ensuring it remains credible, compliant and objective.

properly recorded and accounted for. The Army aggressively enforces this program at the local level via the Internal Review and Audit Compliance Office and reports results to the civilian authorities. DOD consolidates this information for Congress.

The frequent communications between Congress and the Army's Office, Chief of Legislative Liaison (OCLL) provide yet another means of accessing, gathering and measuring Army information and assurances. The OCLL provides Congress with an interface to the Army. It distributes the various congressional requests for information to the appropriate Army component for a timely response.

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Every Army function and activity has checks and balances that provide information and assurances to Congress. Additionally, almost every Army decision and activity is carefully scrutinized by internal Army agencies and then by agencies such as the Government Accounting Office. The Army clearly accounts to Congress.

Critics should avoid comparing apples and oranges. The Army IG system is very different from the statutory federal department–level IG systems. Its 215–year history of outstanding service to the nation, its soldiers and citizens is ample proof that it works. It should not become a stovepipe watchdog for Congress. Sufficient in–place mechanisms exist to provide information and compliance assurances to Congress. The Army needs its existing IG system of fact finders and problem solvers to help the commander ensure both organizational credibility and readiness. ***MR***

NOTES

1. Today there are 26 IG offices in the larger federal departments.
2. The IG Act was further amended in 1988, and 34 additional IG offices were created at smaller federal agencies.
3. A brief aside is necessary to point out the similarities and differences among the uniformed service IGs. For example, the Navy and Marine Corps IGs are the principal advisers to the secretary of the Navy on all matters related to inspections and noncriminal investigations. They are the secretary's eyes and ears in all integrity and efficiency matters. In contrast, the Air Force IG (AFIG) differences are more pronounced. It has two field operating agencies to conduct inspections and criminal investigations. The AFIG also details officers from across the Air Force to conduct senior official investigations.
4. Approximately 70 percent of the Army IG's work is assisting soldiers.
5. Liminality is a technical psychological term for rite of passage.
6. This citation comes from the landmark decision of the Howard B. Levy versus Jacob J. Parker case (417 US 755, 1974).
7. The key soldierly values are commitment, competence, candor and courage. These are found in US Army Field Manual (FM) 100–1, *The Army* (Washington, DC: US Government Printing Office, December 1991), Chapter 4.
8. This authority is subject to the Memorandum of Understanding between the Department of Defense and the Department of Justice as outlined in US Army Regulation (AR) 27–10, *Military Justice*, 22 December 1989, paragraph 2–7.

Lieutenant Colonel Robert L. Maginnis is assigned to the Office of the Inspector General, Department of the Army, Washington, D.C. He received a B.S. from the US Military Academy and an M.S. from the Naval Postgraduate School and is a graduate of the US Army Command and General Staff College. He has served with four infantry divisions in a variety of command and staff positions in Korea, Europe, Alaska and the Continental United States. His article, "The Future of Women in the Army," appeared in the July 1992 issue of Military Review.

BCTP:
A Red Force Perspective

Lieutenant Colonel Jerry A. Simonsen, US Army, and Lieutenant Colonel Michael W. Collins, US Army, Retired

The authors provide a Red commander's perception of his enemy, Blue division and corps commanders. As such, it provides a unique look at our Army from the "enemy's" perspective. Though some of their comments may seem negative, they are made with the professional intent to provide another view that may help units better prepare for division and corps training, and thus for war.

THE BATTLE Command Training Program (BCTP) is the Army's newest combat training center (CTC). Formed in 1987, BCTP has evolved into the capstone CTC, training division and corps commanders, as well as their battle staffs in mid– to high–intensity warfare. In the words of Army Chief of Staff General Gordon R. Sullivan, "Winning in BCTP is developing adaptive, creative, and professionally competent senior officers and generals."

The BCTP opposing force (OPFOR) is the Red freeplay component of BCTP. It is a balanced combination of military personnel and civilian contractors. OPFOR's mission is to doctrinally replicate the operations, tactics and troop control process of the threat force fighting against Blue divisions and corps in BCTP *WARFIGHTER* exercises. It is the only OPFOR in the Army trained to fight at both the operational and tactical levels of war.

BCTP organized and segregated the Red headquarters so that the army, division and regimental staffs suffer the same fog of war as Blue. Though Red replicates doctrinally correct intelligence systems, it has to work for intelligence just as hard as Blue. Combined Arms Command, Threats Directorate, US Army Training and Doctrine Command's threat experts, observe each exercise to validate Red's doctrinal portrayal.

Blue units have shown steady improvement over four years of BCTP *WARFIGHTER*s. What was once a Red tutorial is now a fight for life against much–improved Blue units. This growth mirrors our Army's experience at the maneuver CTCs at Hohenfels, Germany; Fort Chaffee, Arkansas; and Fort Irwin, California. It shows the growing sophistication of our senior commanders and staffs.

Red Perceptions of Battlefield Operating Systems

Command and Control. Blue commanders are very predictable. They normally select the most efficient course of action. It appears their major concern is conserving resources. Because Blue commanders habitually select the optimal course of action, Red usually templates Blue correctly. Blue commanders who use a well–executed suboptimal course of action could surprise Red and seize the initiative. The suboptimal course of action also aids deception planning and execution. A course of action that provides the greatest flexibility for the longest time generates initiative.

Blue commanders sometimes relinquish control of the battle's tempo, and thus the initiative. One common cause appears to be the Blue commander's tendency to change plans often. The

Red commander focuses upon execution of his established plan and uses preplanned variants in order to counter this perceived tendency to change. The Red army staff can doctrinally plan

Although its doctrine says staying inside the enemy's decision cycle is crucial, Blue needs to work harder to do it better. Red, on the other hand, tries to react quickly by utilizing its doctrinal decision–making processes tailored to the time available. These are sequential, parallel and executive methodologies, listed from most time available to least time available.

and begin execution of a new plan in 24 hours. Red's perception is that it takes about three days for a typical Blue corps, or a day for a Blue division to produce a new plan. Thus, when this occurs, the initiative and tempo of the battle accrue to Red.

Also, there is a frequent tendency by Blue to overlook the deep and rear battles and concentrate on the close battle. The Blue commander realizes, too late, that his unwillingness to address the full depth of the battlefield has left him unable to control the tempo of the battle. The Blue commander then cannot influence the enemy's introduction of follow–on forces into the fight, and he no longer controls his own rear area.

Further, it appears as if Blue units, especially divisions, take a long time to react to dramatic changes on the battlefield. Either their orders process takes too long, or their information systems (friendly and enemy) are not working properly. Although its doctrine says staying inside the enemy's decision cycle is crucial, Blue needs to work harder to do it better.

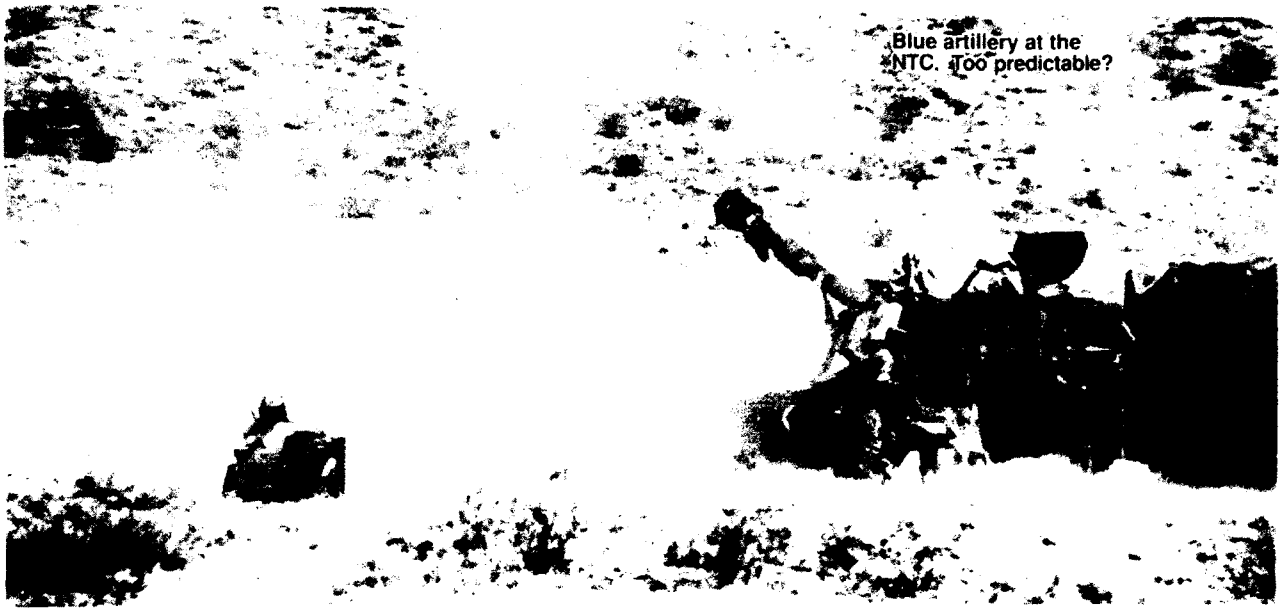
Red, on the other hand, tries to react quickly by utilizing its doctrinal decision–making processes tailored to the time available. These are sequential, parallel and executive methodologies, listed from most time available to least time available.

Intelligence. Think Red, not Blue. Most Blue commanders and their staffs do not examine the battlefield carefully enough from a Red perspective, nor do they appear to understand threat doctrine or capabilities in the detail required by today's battlefield. Though improvement is clearly evident, Blue has to work harder to examine the battlefield from an enemy perspective before it can defeat that enemy.

For example, a North Korean looks at the rugged terrain of his home as an aid to his infiltration style of warfare, not a hindrance. Proper use of that terrain allows him to balance his lack of technology against Blue's technological superiority. Red placement of nonradar–guided antiaircraft artillery (AAA) systems to fire down, rather than up, on Blue aircraft is counter to the way Blue normally templates Red air defense artillery (ADA) placement. Another Korean example: Blue tends to defend in the valleys (best armor avenue) rather than the hilltops (Red's infiltration route).

Red's structured troop control process has a rigidity that can be exploited by knowledgeable Blue commanders. While flexibility exists for Red commanders at the operational level, there is little room for deviation from the original plan at division and below. As the world and the threat change, Blue's capacity to execute a mid– to high–intensity level of war requires a structured troop control process for training. This OPFOR structure provides a framework for Blue to analyze, template and project against. The troop control process currently used by the BCTP OPFOR matches most potential mid– to high–intensity threats in the near term and thus warrants study by Blue commanders.

Frequently Blue damages Red units badly but does not follow through to finish the destruction. This indicates Blue units have difficulty accurately assessing when they have hurt Red. There seems to be a shortage of focused effort to determine the effects of Blue's combat power on Red. Blue must develop the capability to task the appropriate available reconnaissance assets to determine battlefield damage to Red and ensure an accurate assessment of Red capabilities.



Blue artillery at the NTC. Too predictable?

Maneuver commanders are beginning to understand how to use fires to complement their maneuver. Areas Blue may want to emphasize include: quicker massed counterfire reaction, timing between maneuver and fires and exploitation of range differences between Red and Blue systems. The best way to halt a Blue attack is to range counterfire assets just beyond the forward line of own troops. As Blue forms a penetration, its direct support artillery and one reinforcing battalion are just behind the lead task force. Once Red destroys the lead brigade's artillery, the maneuver forces are stranded, stalling the attack.

Maneuver. Blue's conduct of offensive combined arms operations is generally an area in need of improvement. Maneuver units do not practice mutual support; and artillery, ADA and engineer assets do not maximize their support due to improper placement.

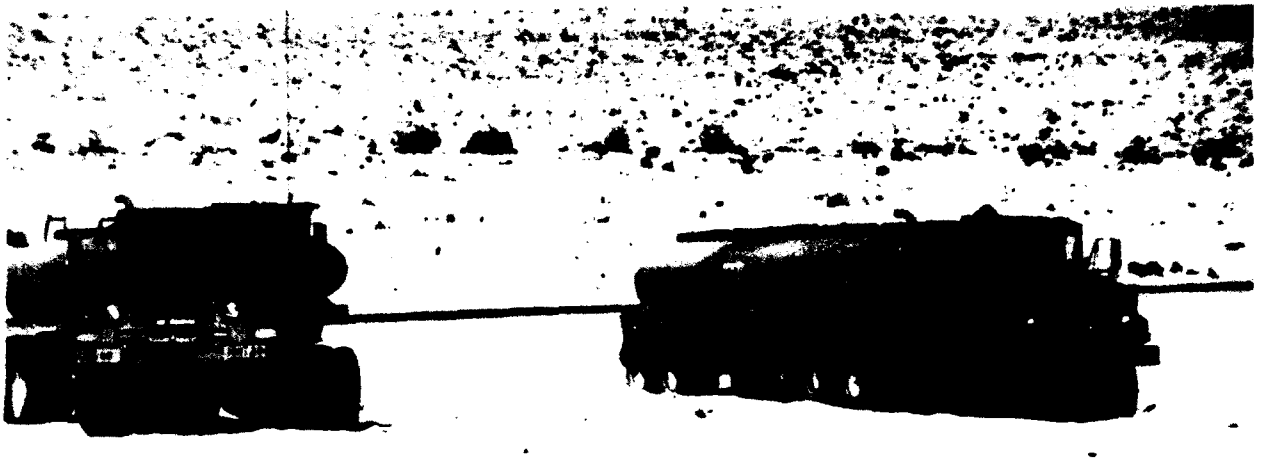
Blue commanders miss the opportunity to achieve mass because they usually attack with balanced task-organized brigades. This seems to be a "fiefdom" or habitual association problem rather than a mission analysis issue; Blue commanders tend to allocate forces equally, rather than weighting the main attack. Blue needs to concentrate harder on synchronizing the fight. Failure to do so leads to piecemeal attack, a lack of mass and possibly destruction of their forces.

To win, Blue must conduct movement to contact with more audacity and with sufficient artillery assets to support the maneuver forces and suppress Red artillery. When Blue makes contact with a moving Red force, they need to quickly gain the initiative through application of massed and prioritized artillery fire followed by quick tactical maneuver to Red's flank to fix or block. Often, however, Red does this to Blue.

This is because Red doctrine, which calls for maneuver to exploit the effects of fires, drives heavy allocation of artillery forward in an approach march. Blue doctrine requires artillery fires to exploit the effects of maneuver. Usually, this results in a small allocation of artillery in a movement to contact. Blue needs to match its growing success in applying Blue artillery doctrine successfully to allocating sufficient artillery to missions.

Deep attacks by attack helicopters work if Blue does intensive intelligence preparation of the battlefield. The Blue unit must successfully collect and analyze data on ADA sites, update all information before the strike, conduct well-executed suppression of enemy air defense (SEAD) and joint SEAD (JSEAD) fires and meet impeccable flight times. Failure to execute these steps properly results in high Blue helicopter losses. Success at these steps results in Red losses and Blue opportunities.

A special area of observation during four years of BCTP exercises is deception. Blue units at



Blue fuel trucks at the NTC. Generally unprotected?

The Achilles' heel of US forces continues to be its extended logistical tail. Support to a technologically sophisticated force is extensive and important. Blue does not always protect logistics areas and main supply routes well. Only recently have Blue units begun taking the rear battle and counterreconnaissance battle seriously. Thus, Red forces often successfully target ammunition dumps, fuel sites and FARPs, in addition to command, control and communications nodes normally targeted.

times misjudge Red's abilities to conduct deception operations and as a result, are surprised. US technological advantages in signal intelligence and electronic intelligence do not compensate for their lack of human intelligence resources in the force structure. Conversely, Blue commanders need to consider mounting believable and adequately resourced deception efforts that target specific Red systems or command echelons.

Fire Support. Blue has a made dramatic improvement in fire support. Massed fires to shape the battlefield, decisive counterbattery and counterfire and effective SEAD are now more the rule than the exception. Maneuver commanders are beginning to understand how to use fires to complement their maneuver. Areas Blue may want to emphasize include: quicker massed counterfire reaction, timing between maneuver and fires and exploitation of range differences between Red and Blue systems.

The best way to halt a Blue attack is to range counterfire assets just beyond the forward line of own troops. As Blue forms a penetration, its direct support artillery and one reinforcing battalion are just behind the lead task force. Once Red destroys the lead brigade's artillery, the maneuver forces are stranded, stalling the attack.

Air Defense. Usually, Blue gives each maneuver force its "fair" share of air defense rather than massing and prioritizing assets to protect the most critical resources. Blue's short-range air defense force structure's technical superiority does not overcome its relatively small numbers. On a more positive note, some Blue units do an excellent job of templating Red's air corridors and ambushing Red aircraft.

Mobility, Countermobility and Survivability. Blue performs countermobility missions well. Successful Blue maneuver units in the defense synchronize obstacle belts, defense forces and artillery to rapidly destroy Red maneuver forces. However, Blue planning and execution of family of scatterable mines (FASCAM) missions is still not to standard. Like any other obstacle, FASCAM minefields require overwatch and careful targeting for direct and indirect fires. Some Blue commanders use this valuable munition piecemeal in unplanned, unwatched locations. This wastes the intended effect of the minefield; but worse, it diverts valuable tube time from more critical missions.

Blue does not perform mobility operations well. They tend to get trapped in operational and tactical fire sacks, allowing themselves to be

destroyed by artillery. This is a problem with proper reconnaissance, as well as planning and executing breaching operations.

Engineer assets are important to Blue success. Thus, they are a high-priority target for Red. When Blue does not protect engineer equipment, it cannot survive. The flip side of the coin is Blue does not always appreciate the large engineer potential of most threat armies. Thus, Blue maneuver units often find their critical attack route blocked by obstacles overwatched by Red forces, often as a portion of an established kill zone. The results can be catastrophic for units that do not conduct reconnaissance and get caught in the teeth of such a trap. Regrettably, this sometimes happens to Red units, particularly when Blue destroys Red reconnaissance units.

Passive measures such as frequent movement of critical assets can dramatically improve survivability, yet some Blue units do not employ them. Airfields are the best example. Blue usually keeps its forward arming and refuel points (FARPs) and aviation units in the same location for several days. Often, only the OPFOR senior commander's rigid control of chemical release saves Blue from severe aviation losses on the ground due to chemical or high explosive strikes. When Red conducts a special operations force attack or conventional missile attacks on a Blue airfield, it is a warning; he knows you are there, and you would be smart to move.

Combat Service Support. Red respects Blue's ability to sustain the force. Ability to quickly turn AH-64 helicopters for deep attacks and high maintenance rates mark Blue actions. However, doctrinal placement of Blue support units and their tendency not to move ease templating and order of battle confirmation by Red.

The Achilles' heel of US forces continues to be its extended logistical tail. Support to a technologically sophisticated force is extensive and important. Blue does not always protect logistics areas and main supply routes well. Only recently have Blue units begun taking the rear battle and counterreconnaissance battle seriously. Thus, Red forces often successfully target ammunition dumps, fuel sites and FARPs, in addition to command, control and communications nodes normally targeted.

Blue's conduct of offensive combined arms operations is generally an area in need of improvement. Maneuver units do not practice mutual support; and artillery, ADA and engineer assets do not maximize their support due to improper placement.

BCTP is a great training opportunity for division and corps commanders and their staffs who share the stress and challenge of this unique training opportunity. Facing the same lack of ground truth and fog of war as Blue, the OPFOR provides a worthy, thinking foe. OPFOR's structured troop control process forces Blue to face a different thought pattern and cultural attitude. Red strives as hard as Blue to synchronize movement and combat power and also fights for intelligence. But in the words of an Operation *Desert Storm* commander, "The Iraqis should have hired the BCTP OPFOR."

US Army divisions and corps are now on their second BCTP rotation. A marked increase in unit capability and sophistication of the fight is readily apparent to OPFOR personnel. Continuation of this trend will lead to more Operation *Desert Storm*-type successes. BCTP is training "adaptive, creative and professionally competent senior officers and generals." ***MR***

Lieutenant Colonel Jerry A. Simonsen recently served as OPFOR army commander for 18 months. He received a B.S. from the US Military Academy and an M.S. from the Naval Postgraduate School. He has served in a variety of command and staff positions in Europe and the Continental United States. He is a previous contributor to Military Review.

Lieutenant Colonel Michael W. Collins, US Army, Retired, served as OPFOR army commander for 18 months prior to his retirement. He was commissioned as an infantry officer from the Reserve Officers' Training Corps program in 1969. He received an M.A. from the University of Wisconsin and is a graduate of the US Army War College.

VII Corps Inactivated

KNOWN AS the "Jayhawk Corps" since World War II, VII Corps gained its nickname following the Normandy invasion. Elements of the corps stormed Utah beach, fought through the hedgerows surrounding the beachhead, then led the drive across France. As a tribute to its role during the subsequent campaign for the liberation of Western Europe, it was dubbed the "spearhead corps of the US First Army."

For 30 years after its redeployment to Germany in the 1950s, VII Corps served in the defense of Western Europe. During the "NATO campaigns" of these three decades, the Jayhawk Corps championed the cause of peace by its constant readiness for war.

In the months following the collapse of the Berlin Wall in November 1989, a dramatic change in the political face of Central Europe confronted the corps. In response, VII Corps ended its border patrols and turned its training from a defensive orientation to one of large-unit movements to contact over extended distances. It led the way toward an increasingly multinational NATO corps organization. At the same time, the corps faced some of the first recent US force reductions scheduled for Europe.

In August 1990, Iraq invaded Kuwait and steadfastly refused to abide by UN resolutions demanding an immediate Iraqi withdrawal. Corps units began planning for possible deployment to Saudi Arabia shortly after the Iraqi invasion, but they did not formalize plans until after Defense Secretary Richard Cheney's announcement of 8 November.

VII Corps soldiers played a major part in Kuwait's liberation, and in doing so, rivaled past efforts of other Jayhawk soldiers. The statistics below compare the last two VII Corps campaigns. The corps left Germany in March 1992, and on 15 April, VII Corps furled its colors for the third time since its formation in 1918. ***MR***

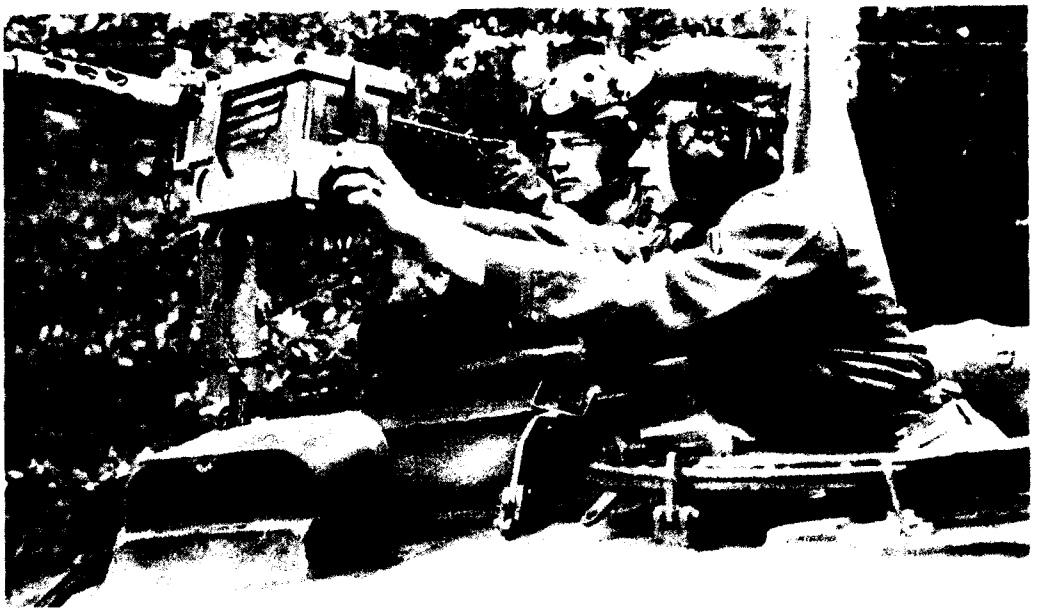
Category	*World War II*	*Gulf War*
Number of days in combat	337	4
Total miles traveled	1,200	150
Greatest advance in one day (in miles)	90	80
Enemy divisions encountered	51	11+
Enemy divisions destroyed	14	11+
Enemy tanks and armored vehicles destroyed	1,164	3,919
Ammunition expended	100,000+ tons	9,000+ tons
POWs	375,000+	26,000

September 1918

September 1944

August 1944

1945

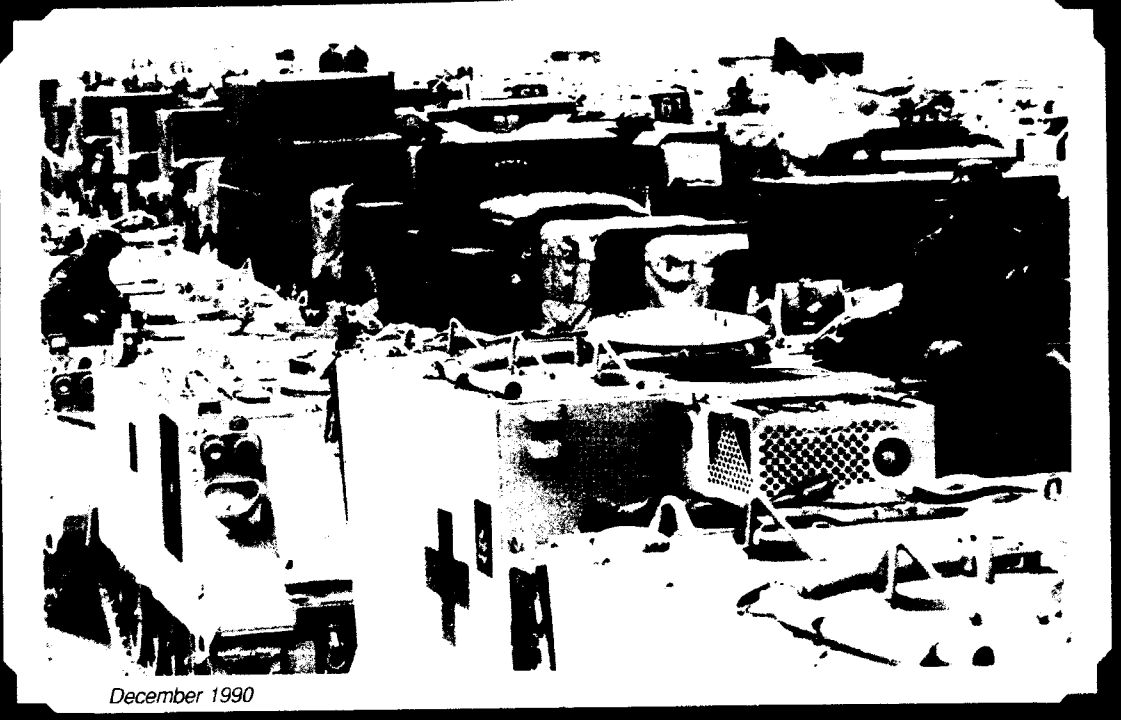


September 1953

March 1964

Fall 1982

October 1971



December 1990

February 1991

Colonel Friedman: The Man Who Broke Purple

Major Leonard S. Kosakowski, US Army

US citizens discovered that perhaps their most potent secret weapon of World War II was not radar, not the VT [variable–timed fuse], not the atom bomb, but a harmless little machine [Purple], which cryptographers had painstakingly constructed in a hidden room in Washington, [D.C.]. —William F. Friedman[1]

As a US Army private, newly assigned to the National Security Agency (NSA) in 1976, I often found time to walk the highly polished halls of the "Puzzle Palace." My jaunts often carried me past a huge auditorium used to present sensitive, highly classified briefings. The NSA called the facility "Friedman Auditorium." At the time, I cared little about who this man Friedman was or what he had accomplished to justify such an honor.

Only now can I fully appreciate the magnitude of Friedman's contributions to World War II cryptologic operations. Friedman's breaking of the Japanese "Purple Code" greatly impacted upon the US ability to successfully prosecute the war.

The Purple code. Cryptologic history claims the Purple Code as one of its most famous encipherment systems.[2] Not only was Purple the most complex enciphering system devised before the days of computers, its solution involved a unique intellectual effort of heroic proportions. Typical of cryptologic successes, even today, Purple's fame occurred not during the war but after, when numerous examples of its importance entered into the public domain.[3]

Imperial Japan used the Purple Code machine to encrypt its most secret diplomatic communications to its ambassadors abroad. Designed with a series of standard six–level, 25–point, off–the–shelf stepping switches and an intricate system of wiring, the Purple machine was put to use by Japan as early as 1937. US cryptographers used the color spectrum to provide cover names for Japanese codes. Although Japan referred to the code as "Angooki Type–A" (Type A Code), the Signal Intelligence Service (SIS) called it "Purple." The SIS had labeled Purple's predecessor "Red."[4]

Friedman, a civilian cryptographer in charge of the Army's new SIS in Washington, first began attempting to crack the Purple Code four years prior to the Japanese attack on Pearl Harbor.[5] But Friedman, due to other administrative duties, worked only intermittently on the code until early 1939. In February, Major General Joseph O. Mauborgne, chief of the Army Signal Corps, ordered Friedman to drop his other administrative duties and invest all his efforts in breaking Purple. The winds of war were beginning to blow stronger in the Far East. Information on Japanese intentions warranted high priority.[6]

At the outset, the amount of Purple traffic available to Friedman to work with was considerably less than traffic from other Japanese cipher systems.[7] "The collection of suitable and ample foreign code material in order to satisfy the cryptanalytic requirements of the SIS constantly posed a critical problem for the Signal Corps authorities to solve."[8] The Radio Act of 1927, in its regulation of radio communications in the United States through the Federal Radio Commission, effectively outlawed the interception or divulging of information relating to the contents of messages. The 1934 Communications Act, which formed the Federal Communications Commission (FCC), did not relax the rigid prohibition of intercept activity. But, by 1938, the War Department obtained special permission to:

"maintain and operate in time of peace under strict provision to insure secrecy, radio intercept and cryptanalytical services as are necessary for training and national defense purpose. This timely decision thus enabled the SIS to expand its radio intercept operations considerably and thereby improve markedly the results being obtained from that important source of foreign intelligence information."[9]

By October 1939, widely scattered listening posts directed their efforts toward intercepting Japanese radio transmissions. Figure 1 depicts the network of intercept stations.[10]

The listening posts sent intercepted messages to Washington by either courier or registered mail in weekly batches.[11] At first, SIS received only a trickle of Purple traffic. By June 1941, over 7,000 Japanese messages had been intercepted.[12] When the SIS received the traffic collected by the listening posts, the first Herculean task was to:

"collect a certain minimum of traffic sent on one day—or, at least, sent with the same keys in operation, which was initially the same thing. The next step was to decide which permutations and combination of wiring could have been used to punch such a set of enciphered messages.[13]

From 1939 to 1941, Friedman and his co-workers attempted to process the traffic, piecing together the encipherment system. SIS' difficulty in breaking the code was compounded by the Japanese procedure of daily changing their Purple Code keys. Copious "cribs" and translations literally drove some SIS personnel to the verge of a nervous breakdown. Friedman himself later succumbed to pressures of the work and was hospitalized due to exhaustion.[14]

William Friedman with the AT&T Printing Telegraph Cipher Machine and double key tape.

Fortunately for SIS codebreakers, Japan took a long time distributing the new Purple machines to their embassies abroad. Consequently, the transition from Red to Purple machines required Japan to send encoded messages in both systems. The SIS had already broken the Red Code. Thus, Friedman and his crew could "crib" in the meaning of some of the Purple messages by using the Red traffic.[15]

The first major ungarbled solution of a Purple message occurred on 25 September 1940—just two days before Germany, Italy and Japan signed the Tripartite Pact. After this initial success, the breaking of Purple gained more momentum. By the winter of 1940, the SIS, assisted by the Navy, had not only broken the basic system but had also reconstructed duplicate Purple enciphering machines.[16] The War Department, Navy Department, commander in chief of the Asiatic Fleet and, subsequently, the British communications intelligence organization in England received these Purple decoding machines.[17]

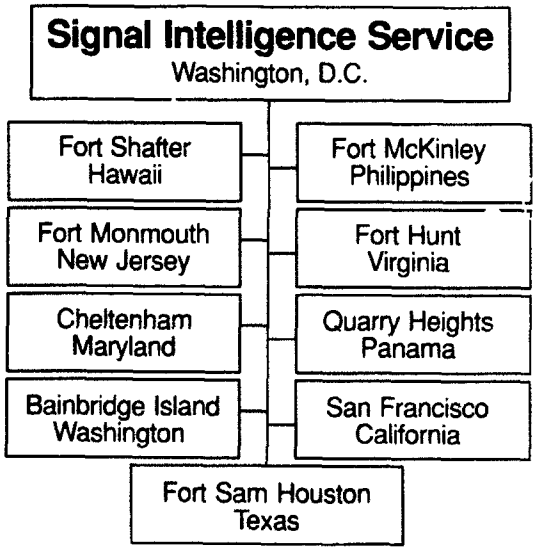


Figure 1.

So spectacular were the results of the efforts of Friedman and the SIS:

"against the Purple machines and so arcane were the processes by which they had been achieved, that General Mauborgne developed the agreeable habit of referring to his cryptologic team as 'magicians'—from which came the U.S. designation of intelligence produced by cryptanalysis as 'Magic.'"[18]

Magic's value. Intelligence derived from Purple provided decision makers in Washington with critical information regarding both Japanese and German actions prior to and after the 1941 attack on Pearl Harbor. Friedman's solution of the Purple Code was the masterpiece of cryptanalysis in the prewar era. By late 1940, Friedman and the SIS were able to make a continual flow of Purple intelligence available to the State Department and the military services chiefs of staff. Top secret information from Tokyo in which Japanese leaders outlined their plans for the future and the strategy and tactics with which they were to be carried out was now in the hands of US decision makers.[19]

The ability to read Purple gave the United States a tremendous advantage over Japan. It was:

"an advantage not likely to be repeated. . . . America's military and government leaders had the privilege of seeing every day the most private

Purple Messages Originating from Tokyo or Japanese Embassies Abroad

TO	FROM	DATE	MESSAGES
Washington	Tokyo	5 May 1941	Japanese ambassador informed about possible U.S. ability to "read" Japanese code.
Honolulu	Tokyo	9 Oct 1941	Tokyo orders reporting of ship disposition Hawaii.
Washington	Tokyo	22 Nov 1941	"After that things are automatically going to happen."
Berlin	Tokyo	1 Dec 1941	Japanese ambassador ordered to inform Hitler that "U.S.–Japanese relations ruptured; war may come quicker than anyone dreams."
Washington	Tokyo	2 Dec 1941	Detailed instructions on how to destroy the code machines in the embassies.
Washington	Tokyo	7 Dec 1941	Fourteenth (and last) part of message "regretting impossibility of U.S. and Japan to reach an agreement."
Washington	Tokyo	7 Dec 1941	Japanese ambassador ordered to submit reply to U.S at "1:00 P.M. on the 7th, your time."
Washington	Buenos Aires	Dec 1941	Japanese intentions to wreck the Rio Conference and the Good Neighbor Policy.
Tokyo	Berlin	10 Sep 1943	Japanese report on German anti–invasion defenses on the French Atlantic coast.

Figure 2.

communications between the Japanese government and its ambassadors . . . . They knew in advance the diplomatic moves that Japan was contemplating and the sorts of information that her agents were collecting on American defense preparedness."[20]

Figure 2 lists examples of Magic derived from Purple.[21]

Purple alone, of course, did not win the war for the United States against Japan. It was a tool, an important one, that provided leaders with critical, strategic intelligence. By no means was Purple the only Japanese code broken before and during the war with Japan. The Japanese naval code, known as JN–25, provided timely, valuable intelligence for the US Pacific Fleet during operations in Midway, the Coral Sea and other famous encounters with the Japanese Imperial Navy. There were many other cryptologic successes.

But it was the Japanese Purple diplomatic code that received the most notoriety after the war. And it was cryptologic successes during the war that enabled the cryptologic profession to continue to develop after the signing of the Japanese surrender in 1945.

Cryptology after the war. The priceless results of cryptologic organizations during the war clearly justified the growth they experienced during the conflict. Excluding theater operations, the Army's SIS grew to 10,000 men and women by the end of the war. President Harry S. Truman clearly appreciated the value of cryptology—even after World War II. In 1949, he created the Armed Forces Security Agency, which three years later was broadened to the NSA, today the nation's largest intelligence agency.

Cryptology, even today, continues to play a significant role in modern warfare, both at the tactical and strategic levels. It bolstered national security through the long twilight struggle of the Cold War recently won by the West. Cryptology (signal) is now a major player in the intelligence triad of signal, human and imagery intelligence.

As I now walk past Friedman Auditorium in the NSA, I can more fully appreciate the magnitude of Friedman's contributions not only to the field of cryptology but also to the security of the nation. Cryptology did not win any wars for the United States—but it did, and hopefully will continue to, provide decision makers with timely, valuable intelligence. ***MR***

NOTES

1. William F. Friedman, "The Friedman Lectures," Lecture One (Fort Meade, MD: National Security Agency [NSA], 1963), 2. Six lectures were presented by Friedman under contract by the NSA.
2. Although commonly referred to as the "Purple Code," the system was not a "code" but actually a "cipher" system.
3. Ronald Clark, *The Man Who Broke Purple* (Boston: Little, Brown & Co., 1977), 138–39.
4. Ibid., 140. There is apparently some confusion regarding what the Japanese called Purple. One author refers to Purple as the "Angooki Type A" (Type A Code); another author claims the Japanese called Purple the "97–*shiki obun insiki*" (Type–97 telegraph machine).
5. The Signal Intelligence Service (SIS) was the forerunner of the Army Security Agency (ASA) and the NSA.
6. Clark, 142.
7. The cryptologic community often refers to communications, that is, messages, as "traffic."
8. Bruce W. Bidwell, *History of the Military Intelligence Division, Department of the Army: 1775–1941* (Frederick, MD: University Publications of America, 1986), 332.
9. Ibid., 332.
10. Ronald H. Spector, ed., *Listening to the Enemy—Key Documents on the Role of Communications Intelligence in the War with Japan* (Wilmington, DE: Scholarly Resources, Inc., 1988), 11–12. The US Navy's central processing location for traffic was located in Hawaii. Overall, the Navy had in excess of 200 intercept/direction–finding stations that could have assisted in the intercept of Purple; and Bidwell, 332–38.
11. ASA, *Historical Background of the Signal Security Agency* (Washington, DC: US Army, 1946), 297.
12. Ronald H. Spector, *Eagle Against the Sun* (New York: The Free Press, 1985), 446.
13. Clark, 141.
14. Spector, *Listening to the Enemy*, 7.
15. Ronald Lewin, *The American Magic—Codes, Ciphers and the Defeat of Japan* (New York: Farrar, Straus, Giroux, 1982), 43.
16. Clark, 146.
17. Spector, *Listening to the Enemy*, 7.
18. Thomas Parrish, *The American Codebreakers—The U.S. Role in Ultra* (Chelsea, MI: Scarborough House Publishers, 1986), 56.
19. Clark, 146.
20. Roberta Wohlsetter, *Pearl Harbor—Warning and Decision* (Stanford, CA: Stanford University Press), 170.
21. US Navy, *The Role of Radio Intelligence in the American–Japanese Naval War (August, 1941–June, 1942)*, Vol. I (Washington, DC: 1942), 88–90, 93 and 113.

Major Leonard S. Kosakowski is a signal intelligence–electronic warfare officer serving with the 703d Military Intelligence Brigade, Schofield Barracks, Hawaii. He has also served in Korea and Japan. He received a B.A. from the University of Maryland and an M.M.A.S. from the US Army Command and General Staff College.

April 1943

MAJ George J. Mordica II, Combat Studies Institute, USACGSC

Friday 2—A stalemate develops in Tunisia, as Allied and Axis forces are weak and cannot dislodge the opposition.

Monday 5—Allied air forces mount a concentrated campaign against Axis shipping in the Mediterranean to deny supplies to Axis forces left in North Africa.

The Japanese overrun the Headquarters, British 6th Brigade, in Burma and gain control of the Mayu Peninsula.

Tuesday 6—General Sir Bernard L. Montgomery's Eighth Army resumes the offensive in North Africa, attacking Wadi Akarit in Tunisia.

Wednesday 7—Adolf Hitler and Benito Mussolini meet near Salzburg, Austria, to discuss the situation in North Africa and the Soviet Union.

Thursday 8—Allied forces attack the Fondouk line in Tunisia.

Sunday 11—US and British forces link up near Kairouan, Tunisia.

Monday 12—Germany announces the uncovering of mass graves at Katyn, Soviet Union, where thousands of Polish army officers were executed and buried by the Soviets.

Tuesday 13—British forces reach the final German defense line in Tunisia at Enfidaville but lack the strength to take it.

Thursday 15—In the Aleutian Islands, the first elements of the US 7th Infantry Division embark for the Attu operation.

General Omar Bradley assumes command of the US II Corps, replacing Lieutenant General George S. Patton Jr., who continues preparing for the invasion of Sicily.

Friday 16—The Polish government in London requests that the International Red Cross investigate the Katyn massacre.

Sunday 18—Admiral Isoroku Yamamoto, commander in chief of the Japanese Combined Fleet, is killed when his plane is shot down while attempting to land at Bougainville in the Solomons.

The Soviets announce that the Katyn massacre is a German fabrication.

The "Palm Sunday Massacre" begins a series of disastrous Axis air attempts to supply isolated forces in Tunisia.

Monday 19—In Poland, the Warsaw ghetto rises against the Germans.

Monday 26—The Soviets break off diplomatic relations with the London–based Polish government over Katyn accusations.

Wednesday 28—The last German armor attacks in North Africa occur.

Insights

Accommodating the Wartime Media: A Commander's Task

Major General Paul E. Funk, US Army

From the American Civil War to Operation *Desert Storm*, US military commanders have argued that restrictions should be placed on journalists to protect the lives of American soldiers and ensure the success of operations. The fear has existed that large numbers of journalists roaming and reporting unchecked from front lines will compromise operations and endanger lives.

The media counter that they have a legitimate role on the battlefield as they report war events. They believe this right of access is constitutionally guaranteed, but further, it is their fundamental belief that they have a duty to report.

Though the perfect solution for both sides may never be achieved, the military and the press made yet another attempt to define their own wartime rules of engagement at a conference in April 1992. Representatives from a number of national media organizations and the Department of Defense (DOD) met in Wheaton, Illinois, in an effort to find the middle ground that has so far eluded us both.

I was invited to the conference in hopes that my experiences in dealing with the media as a division commander during *Desert Storm* would be helpful in defining future military–media relationships. I would like to share the following thoughts that may be of assistance to commanders.

Supporting the media. Both the military and media agree that the logistics to transport and support the media and their equipment was a major issue in covering the Gulf War. According to Pete Williams, assistant secretary of defense, Public Affairs, the military could have done a better job helping reporters to the battlefield. He also believes there exists an obligation to get reporters out with the action, then help them get their stories back to the press center.

I am not sure we thoroughly thought through the implication of fighting in the desert while also providing support to the media. The main problem was support, such as "moving" stories and videotape. None of us, including the media, considered the great distances involved in getting the media to the locations needed to file their stories.

However, just how far commanders can go to support media requests will always be a matter of priority. I admit that in the press of things, operational planning and, of course, the immediate problems of daily events were considerably more important to us. Journalists must realize they cannot talk to everyone all the time. There are times when the commander has to be focused on planning and discussing the war fight, but balance must be achieved.

In an article published in the *London Sunday Times*, one of my staff members was quoted on the 3d Armored Division's role in *Desert Storm*. The problems resulting from the statement were totally blown out of proportion. I had to conduct an investigation, which took a lot of time, during the same period we were readying for attack. When flak of this nature rolls down to you, you think, "Is this time given to the media worth it? I've got lives to think of, people to think of."

Security review. The issue of whether the policy of public affairs officers' review of media products should be continued is a major sticking point in military–media relations.

When hostilities commenced in the gulf, all pooled media products were required to undergo a security review by a public affairs escort officer on the scene. The nearly total lack of military-experienced journalists caused apprehension that most journalists might not realize the sensitivity of certain information and might divulge details of military plans, capabilities, operations or vulnerabilities.

There were concerns that the public affairs officers would interfere with the reporting process; however, we tried not to slow things down. The chief of staff (or the intelligence officer, if there was a possible security problem) reviewed things quickly. You must try to push things on as quickly as you can.

Disputes between public affairs officers and reporters over whether material was releasable could be elevated to the assistant secretary of defense, Public Affairs, for review. But the ultimate decision on publication rested with the reporter's news organization, not with the military.

Security review is further complicated by the media's technological advances. Their high-tech

Information for this article was provided by Staff Sergeant Mark S. Kalinoski, noncommissioned officer in charge, Army News Service.—Editor

equipment has made them less dependent on the military, and their instantaneous communications may present exactly the wrong picture. We are all concerned about that, particularly in the casualty reporting business. The media become involved when they are filming or reporting, and a name or unit is mentioned. It is more than our families at home should have to bear.

However, I do not think there was any real problem with reporters compromising the 3d Armored Division—its location or efforts—to the point where they would have hurt future combat operations.

Telling the Army story. There is a story that could have been told about a magnificent US Army, the greatest army in the world. I regret that more of our soldiers did not get the kind of media exposure they deserved for their heroic actions. They lived and fought under the most difficult circumstances.

When I returned from Southwest Asia, I was upset to find that people did not know that the 3d Armored Division and VII Corps had been in a very heavy fight under great contact with some of the enemy's first-rate units. The story was not told well enough about the people who did the fighting—the companies, platoons and task forces.

My feeling is that the real story is about our soldiers. Invariably, if you allow the media to look at what you are doing and put them with the soldiers, it comes out fine. You must take advantage of the opportunity to show your good points and hope that journalists are fair about it.

I had requests for interviews the same day we had briefings for the attack, but I felt I did not have time for them. I did not try to avoid the interviews, but on the other hand, I did not seek the publicity either. In retrospect, I probably should have for the division's sake.

I feel commanders should take a more active role in dealing with media requests. I will be more aggressive in the future in providing media access to my people and making myself available for interviews, if the media wants them.

My advice to commanders in dealing with news organizations would be:

- If you do not *know* about a subject, do not *talk* about it. (Most writers could probably follow that advice too.)
- Do not be "thin skinned." If information appearing in a news story is wrong but does not give away any military secret or compromise intelligence information, do not worry about it.
- Be candid. Tell the truth, or say, "I don't know" or "I can't say." The worst thing you can do is lie.

Rules of the relationship. Though some sparks flew here and there, nine principles were agreed upon at the conference. We talked about our experiences, about access and how we could better work together, using these principles, to allow something we fight for—a free press. We agreed we needed to figure ways to help this process, and we all came away acknowledging the following principles of combat coverage:

- Open and independent reporting will be the principal means of coverage of US military operations.
- Press pools are not to serve as the standard means of covering US military operations. Pools may sometimes provide the only feasible means of early access to a military operation. Pools should be as large as possible and disbanded at the earliest opportunity—whenever possible, within 24 to 36 hours. The arrival of early access pools will not cancel the principle of independent coverage for journalists already in the area.
- Even under conditions of open coverage, pools may be appropriate for specific events, such as those at extremely remote locations or where space is limited.
- Journalists in a combat zone will be credentialed by the US military and will be required to abide by a clear set of military security ground rules that protect US forces and their operations. Violation of ground rules can result in suspension of credentials and expulsion of the journalist(s) involved from the combat zone. News organizations will give their best efforts to assign experienced journalists to combat operations and to make them familiar with US military operations.
- Journalists will be provided access to all major military units. Special operations restrictions may limit access in some cases.
- Military public affairs officers will act as liaisons but should not interfere with the reporting process.
- Under conditions of open coverage, field commanders should be instructed to permit journalists to ride on military vehicles and aircraft, whenever feasible. The military will be responsible for the transportation of pools.
- Consistent with its capabilities, the military will supply public affairs officers with facilities to enable timely, secure, compatible transmission of pool material and will make these facilities available, whenever possible, for filing independent coverage. When government facilities are unavailable, journalists will, as always, file by any other means available. The military will not ban communication systems operated by news organizations, but electromagnetic operations security in battlefield situations may require limited restrictions on the use of such systems.

These principles will apply, as well, to the operation of the standing DOD national media pool system.

The future. The successful application of these principles in future conflicts remains to be seen. However, it is clear that strides are being taken to improve the military–media relationship and that the principles are endorsed at the Army's highest levels.

According to Army Chief of Staff General Gordon R. Sullivan, "[The principles] are a product of our experience with the media during and after Operation Desert Shield/Storm. Army Public Affairs is working hard on doctrinal, structural, training, and equipment modernization initiatives that will fundamentally improve our Army's collective ability to support these principles. Each of these efforts has my unequivocal support."

Incorporating the media into the battle plan and training to support them should be a priority. What we are doing in terms of writing doctrine and implementing the principles into the planning process of preparing for battle is a very important step that is going to help all of us. Public affairs training is currently incorporated at the Joint Readiness Training Center, Fort Chaffee, Arkansas, in conjunction with the units' tactical training. Future plans include similar training at the National Training Center, Fort Irwin, California.

The bottom line is that public affairs is a commander's task. Today and in the future, the media will be wherever we are, and those same media will be the link with the American people. As commanders, we must follow the adage—train in peacetime as you would fight in war—and that includes working with the media. ***MR***

Major General Paul E. Funk is commanding general, US Army Armor Center and Fort Knox, Kentucky. He received a Ph.D. from Montana State University and is a graduate of the US Army War College. He has served in a variety of command and staff positions in Vietnam, Korea, Germany and the Continental United States, to include vice director, J–3, The Joint Staff, Washington, D.C. He was the commander, 3d Armored Division during operations Desert Shield *and* Desert Storm.

Letters

Unsurpassed Training Tool

It has taken awhile, but I am finally catching up on some of my professional reading! Your June 1992 issue contained an article by Major John L. Krueger, "Pitfalls in Combat Simulations." I found the article insightful and instructive and sincerely believe it should be mandatory reading for leaders planning, executing or evaluating simulation–based collective training. We at the US Army Combined Arms Command–Training, Fort Leavenworth, Kansas, have incorporated Krueger's major points into the Battle Command Training Program's (BCTP's) week–long Battle Command Seminar held here for all division and corps commanders and their staffs.

Once again, it takes one of our US Army's "iron majors" to wake us up. Krueger opens his discussion by focusing on the Army's standardized training doctrine, which is straight out of US Army Field Manual 25– 100, *Training the Force*.

As pointed out by the author, commanders must thoroughly understand and implement this doctrine in order to set the proper tone and tempo for any training event. A key principle in our training management doctrine that is sometimes not executed to standard is the after–action review (AAR) process. AARs must be planned and resourced up–front in any training exercise to ensure success. This focuses the training audience on the commander's clearly defined exercise training objectives. AARs must then be provided to the training audience to provide it the necessary feedback, allowing the participants to "self–discover" important lessons from the training event.

The meat of Krueger's article addresses the impact that simulations have made and are making on our training. It is certainly true that the dynamic and rapidly evolving simulation technology continues to provide us with a training tool that is unsurpassed in its potential to assist us in large–scale, multiechelon training. It must be remembered, however, that simulations such as the Corps Battle Simulation (CBS) are merely training tools—a means to an end, but not the end itself. Too often, during BCTP *WARFIGHTER* exercises, we see the player unit lose perspective and attempt to adapt its tactics, techniques and procedures to fit a simulation such as CBS. Attempts to "beat the simulation" only shortchange the training unit by not allowing the unit to "train as we will fight." Winning in a BCTP exercise was summed up best by Army Chief of Staff General Gordon R. Sullivan as a goal to produce "Creative, Adaptive, Professionally Competent Senior Leaders."

This was a candid and insightful article by a dedicated professional. I hope to see similar articles in the

future, perhaps an entire issue of *Military Review* focused on the way our Army trains with simulations.

BG William L. Nash, *USA, Deputy Commanding General, US Army Combined Arms Command–Training, Fort Leavenworth, Kansas*

Snoopy Media Essential

Major Melissa Wells-Petry has some good points in "Reporters as the Guardians of Freedom" (February 1993 *Military Review*), but her methodology is too one-sided to sustain her overblown implication that the military should unilaterally dictate media access in wartime.

She stacks the deck by ignoring the following, which I believe are the real issues:

The media may know little about combat, but their grasp of war's political stakes and realities is often better than ours. It is hogwash to say they can rely on us for such stories.

The media presence is a check on military behavior, as well as on the truth. The My Lai massacre would not have occurred if there had been a television crew there. The World War II poison gas testing scandal proves no behavior is too vile for unscrutinized officials, even (sadly) Army officers. Media observation deters such crimes.

The "military" sometimes lies. As a civilian reporter, I have caught the "Army" lying. As a military public affairs officer (PAO) of 20 years' experience, I have seen officials lie and cover up, not to protect troops but to conceal bungling or indeed for no particular reason at all.

Without reporters, the military loses credibility. The public is suspicious of happenings behind closed doors. Snoopy media make us credible by visibly making it hard for us to lie.

Ernie Pyle boosted troop morale better than the Hometown News Center ever could.

War is a struggle between national wills, not armies. So public perception (and media) are vital to victory, though media members hate to admit it. Our Gulf War victory would have been impossible without public support. Media coverage of Iraqi misconduct did more to win that support than anything the military did. Reporters in Baghdad made it harder for Iraq to exaggerate collateral damage.

Security and media numbers/safety are excuses, not reasons. Many security issues are nonsense. We routinely withhold information to hide it from Americans, not the enemy. Few media resent bonafide security rules (for example, hiding unit locations). As for media numbers/safety, why did so many PAOs watch the Gulf War from afar? Because US Central Command (CENTCOM) deliberately rejected PAO support in order to have an excuse for restricting the media! Army personnel virtually had to beg CENTCOM to request PAO support. Perhaps the media would find pools and escorts less odious if we provided better service.

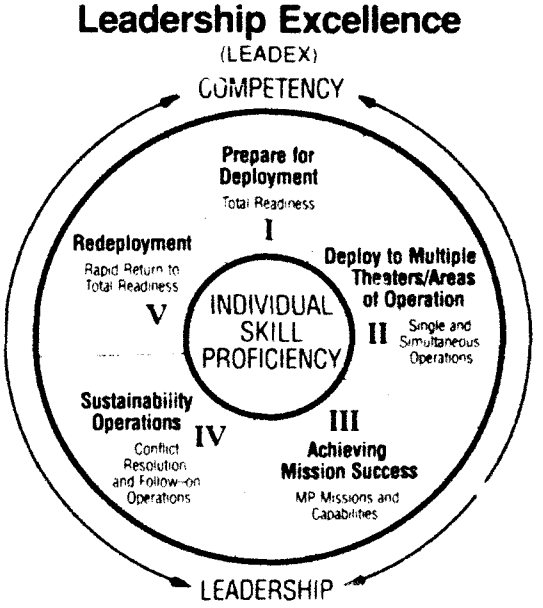
Of course we need reasonable security rules. Of course there is bias and incompetence in media coverage of military stories. But it is useless to try to wish the media out of the way. It is better to work with them, offering more access in exchange for upgraded expertise and fairness among military reporters.

MAJ Harry F. Noyes III, *USAR, San Antonio, Texas*

Corrections

Several editing errors were made in Colonel P. S. Newton's book review of Korea, 1991 *in the November 1992* Military Review. *In paragraph two, the only quote attributable to General Robert W. Sennewald should be "a region in which attempts at hegemony would be extremely destabilizing and globally significant."; in paragraph three, "unlikely" should be "likely"; and in paragraph four, "continental ballistic missiles" should be "confidence-building measures" and "policy" should be "priority." Our sincere apology is offered to Colonel Newton for these errors.*

Due to an editorial oversight, the Leadership Excellence Model was cut from Brigadier General Salvatore P. Chidichimo's March article, "Training Leaders for a Force Projection Army." We apologize for this error on our part and greatly appreciate having this brought to our attention.



Book Reviews

REFIGHTING THE LAST WAR: Command and Crisis in Korea, 1950–1953 by D. Clayton James w' ' Anne Sharp Wells. 282 pages. The Free Press, New York. 1992. $24.95.

Over the past five years, there has been a virtual explosion of historical work on the Korean War. Much of this work, however, has concentrated on either the war's tactical fighting or its diplomatic maneuvering, leaving assessment of the theater-level commanders largely overlooked. D. Clayton James, the distinguished biographer of General Douglas MacArthur, nicely fills this gap with a well-balanced and insightful study of the US high command during the war. Without hesitation, I recommend this superb book as both a first-rate introduction and an incisive examination of the Korean War.

James examines his subject by first looking at five senior US leaders and then evaluating six crucial command decisions. He evaluates the actions, attitudes and roles of President Harry S. Truman and his four senior commanders in Korea—generals Douglas MacArthur, Matthew B. Ridgway and Mark W. Clark, and Admiral C. Turner Joy. Each of the five portraits is a cogent, balanced assessment, giving credit, as well as finding fault. The result is both refreshing and illuminating.

After building a rough chronology of the war through his discussion of the leaders, James turns to the six command decisions that he considers to be military turning points. These are sending troops to Korea, launching the Inch'on landing, liberating North Korea, dismissing MacArthur, settling for an armistice and limiting the war. James thoroughly evaluates the conditions and assumptions of the decisions and the merits of the alternatives. In the process, he puts many myths, especially those about MacArthur, to rest. He also places the decisions in ' ir military, political and diplomatic context. This .. especially important since the State Department played a progressively greater role in formulating military, as well as diplomatic, policy.

In both parts of his book, James shows how the experience of total war from 1941 to 1945 shaped the way the US military waged war in Korea. From June to November 1950, the US-dominated United Nations' forces refought World War II, using its tactics to relentlessly push toward an all-out victory. After the Chinese intervention and the dismissal of MacArthur, this push for decisive victory ended. Strategic priorities, allied pressure and a shortage of manpower helped limit the war. Here, James' ideas are the most thought-provoking. The legacy of World War II was abandoned as we moved to an era of limited, and sometimes unconventional, war.

Like any of James' histories, *Refighting the Last War* should not be missed. Engagingly written and solidly researched, James weaves the battlefield events into the strategic picture through his examination of the US high command and its decisions. As he does this, he focuses on the war's important trends and issues, giving us an effective framework that will, no doubt, help us better understand one of the most complex and strangest US wars. More important, James gives us an appreciation of the frustrations and complexities of waging limited war in our modern times.

CPT Michael E. Bigelow, *USA, Headquarters Company, 306th Military Intelligence Battalion, Fort Huachuca, Arizona*

MIRACLE IN KOREA: The Evacuation of X Corps from the Hungnam Beachhead by Glenn C. Cowart. 136 pages. University of South Carolina Press, Columbia, SC. 1992. $29.95.

This is a well-written, fast-moving book on one of the outstanding campaigns fought by US troops during the Korean conflict. The story focuses on the 3d Infantry Division and its initial role in Korea after its landing at Wonsan on the east coast of North Korea on 11 November 1950. On 5 December, the "Rock of the Marne" division was then deployed to secure the evacuation of the beachhead at Hungnam, until its successful completion on 24 December 1950.

Glenn C. Cowart establishes the story well, pointing to the unpreparedness of the United States to fight a war in Korea with an untrained, understrength and mostly inexperienced US Army still recovering from the deactivation after World War II. These drawbacks, coupled with the problems of frostbite, hypothermia and using obsolete and defective equipment in subzero temperatures, made the fighting that much more difficult.

The villain in the story, ambitious X Corps Commander Major General Edward M. Almond, brings

about the eventual retrograde movements of his corps and the evacuation from the Hungnam beachhead as a result of his miscalculations of the enemy. On 28 November 1950, Almond is on the offensive but with his units well scattered. He is confident of victory over the Chinese communist hordes even as they are about to attack and overwhelm many of his forces.

There are a couple of minor irritants. Cowart briefly touches on Almond's shortcomings in Chapter 1 but defers further explanation to the last chapter. Developing some of Almond's flaws earlier would have enhanced the story. And, throughout this fine story, the author often uses notes rather than include the information where appropriate into the text.

The plan for the evacuation of the Hungnam beachhead was a classic and was executed to perfection by the 3d Division—especially by those involved in the fighting at the platoon and rifle company levels.

LTC George C. Kuhl, *USA, Retired, Augusta, Georgia*

A PREPONDERANCE OF POWER: National Security, the Truman Administration, and the Cold War by Melvyn P. Leffler. 689 pages. Stanford University Press, Stanford, CA. 1992. $29.95.

The United States is striving to adapt to a new international order. For those interested in the only period in modern US history analogous to today, Melvyn P. Leffler's recent book will prove enlightening. It is a comprehensive overview of the evolution of US grand strategy in the aftermath of World War II.

In 1945, Europe's economy was shattered and defunct, there were nationalist movements in several global regions, active communist parties in Europe, and Soviet armies were residing in Eastern Europe and Northeast Asia. "U.S. officials defined their national security in correlations of power" or "power relationships," identifying national resources, military bases and industrial infrastructure as power's most important components. They knew that in a global war, what would count was not the number of tanks or planes available on the day war began but rather the strengths of the opposing economies.

Accordingly, policy makers recognized that no country could threaten or defeat the United States in a war. Despite the rapidity of US demobilization, Leffler documents that at no time were they afraid of a contemporary Soviet military threat or that the Soviet Union would willingly go to war against the United States. Rather, their fear was that the Soviet Union somehow would take advantage of economic devastation and political unrest, bring other nations into its orbit, develop an autarkic system and, in 10 to 20 years, present an *actual* military threat to the United States. Should the communist Soviet Union obtain parity, the United States would have to so mobilize and regiment itself that American society would be fundamentally changed.

Leffler clearly depicts how US policy makers predicated their actions and policies to prevent this eventuality. They "were willing to accept a rupture in the Soviet–US relationship because they were convinced that the dangers of inaction greatly exceeded the risks that inhered in provoking the Soviets." Consequently, in 1947, the United States seized the initiative (and solidified the Cold War) with measures such as the Truman Doctrine, the Marshall Plan and the London Agreement on Germany.

The interim goal of US policy, Leffler shows, was to create a "preponderance of power" that would allow the United States to contain Soviet communism and, more important, eventually drive it back. The problem, of course, was that limited resources existed. The resulting national strategy emphasized economic aid and military assistance for allies and noncommunists, while an atomic shield secured Western Europe. The work of restoring Europe's economy, while safeguarding "the core" of industrialization—Western Europe, Germany and Japan—and preventing communist expansion became top priority. But, the "key centers of industrial power . . . could remain independent of the Soviet orbit only if they maintained viable trade relationships within the so-called free world." Thus, to maintain the core, the periphery had to be protected. That these objectives were viable without large conventional military forces was a calculated risk that all accepted.

The policy makers, Leffler concludes, showed great wisdom in identifying the "economic foundations of geopolitical success." Military buildup occurred only after the Soviet development of the atomic bomb, the triumph of the Chinese Communists and the start of the Korean War convinced them the Soviets now might be more inclined to take risks that could lead to war. Calculated risks now could not be taken until the United States augmented its military strength. "Eventually rearmament became the essential prerequisite to America's diplomatic, economic, and political initiatives."

There were problems. Involvement in the periphery—areas such as Southeast Asia and Indonesia—often led to conflict with nationalist movements. Additionally, Soviet communism had to be stopped everywhere and any conditions even remotely favorable to its establishment, prevented. Global containment required a great many more assets than policy makers originally had hoped to commit; further, once partial commitments were

made, logic seemed to demand that additional assets be committed.

This book should end some debates about the motivations of US policy makers. While Leffler is sometimes critical of those policy makers (and rightfully so), what is most striking is his empathy for their anxieties and actions when confronted with a daunting threat and task. For the people to whom the security of the nation was entrusted, he emphasizes, these fears were legitimate.

Leffler has synthesized and incorporated an impressive amount of material, both primary and secondary, with more than 2,000 endnotes. His coverage of the formulation and implementation of national security policy is comprehensive, both geographically and chronologically. Despite the complexities of threat analysis and policy evolution, this book is well and clearly written. Although a historian might dispute certain of Leffler's evaluations, any disagreement would be insignificant in comparison with his achievement. This will be the standard source on US foreign policy during the Truman administration period for a very long time.

Stephen J. Lofgren,
Center of Military History, Washington, D.C.

BETRAYAL AT PEARL HARBOR: How Churchill Lured Roosevelt into WWII by James Rusbridger and Eric Nave. 302 pages. Summit Books, New York. 1991. $19.95.

On the 50th anniversary of World War II, it is not unexpected that another book attempts to answer the question of what really led up to the Japanese attack on Pearl Harbor. Both James Rusbridger and Eric Nave come well-prepared to write on this complex subject, each possessing extensive intelligence operations experience. This book is the result

PASS IN REVIEW

ISLAND FORTRESS: The Defence of Great Britain, 1603–1945 by Norman Longmate. 580 pages. Random House, Inc., London. (Distributed by Trafalgar Square, North Pomfret, VT.) 1992. $55.00.

Here is an old-fashioned, trumpet-blowing, glint-of-saber, whiff-of-grapeshot narrative history that tells the tale of the various attempts to invade the British Isles from the early modern period to World War II. Although the book offers little that could be called original or ground breaking, it does provide a comprehensive and balanced survey of the subject. Those interested in British history will find it entertaining and satisfying.—**MAJ James J. Carafano, *USA, USACGSC***

COAST WATCHING IN THE SOLOMON ISLANDS: The Bougainville Reports, December 1941–July 1943. Edited by A. B. Feuer. 208 pages. Praeger Publishers, New York. 1992. $42.95.

At the outset of World War II, Australia began using civilians as coast watchers to provide early warning of enemy ships and aircraft. Two spotters on Bougainville Island in the Solomons—Jack Reid, a civil servant, and Paul Mason, a planter—played a critical role during the first 18 months of the Pacific war. Admiral William F. Halsey said the information sent from Bougainville saved Guadalcanal and Guadalcanal saved the South Pacific. These understated reports, which will be indispensable to scholars, make little of the dangers and stress that Reid and Mason endured until the Japanese finally succeeded in driving them off Bougainville in July 1943. However, by then, the South Pacific was firmly secure.—**COL Thomas S. Jones, *USA, Retired, Clearwater, Florida***

SHE WENT TO WAR: The Rhonda Cornum Story by Rhonda Cornum and Peter Copeland. 203 pages. Presidio Press, Novato, CA. 1992. $19.95.

This fast-paced book will bring back many memories and emotions for Gulf War veterans. Major Rhonda Cornum's narration of her daily experiences as a prisoner of war and of those captured Americans with whom she had contact is fascinating reading. During captivity, Cornum exemplified strength of character and unwavering dedication to military values. As future conflicts will engender future prisoners of war, of critical interest will be the techniques she used to maintain perspective and optimism. The final chapter comprises Cornum's views on physicians as soldiers, women in combat, being a patient and the compatibility of parenting and military life.—**LTC Ruth Cheney, *USA, Medical Department Activity, Quarry Heights, Panama***

of a series of extensive interviews conducted by Rusbridger with Nave, who according to Rusbridger is the "Father of British code-breaking in the Far East."

The authors believe Prime Minister Winston Churchill and the British leadership (military and civilian) not only knew—through radio communications intercepts and successful intelligence efforts that broke the Japanese military and diplomatic codes—that the attack on Pearl Harbor was going to happen but deliberately withheld the information from the United States.

The authors also contend that President Franklin D. Roosevelt had no prior knowledge of the attack based on these intercepts but that senior US military officers did. They further conclude that, contrary to the commonly held historical belief that the United States knew of Japanese *military* plans, it did not. The intercepts were diplomatic in nature. Rusbridger believes "Churchill was jubilant at having won his battle to let Japan drag America into the war."

An important secondary benefit of the book is its excellent summary history on the formation and development of code-breaking organizations in the United States and Great Britain, which is a superb examination of this important subject.

How well do the authors succeed in proving their contentions? Much of what they write is circumstantial and ranges from the minute to the quite convincing. But this is a worthwhile work. Although the method is deductive and open to the inevitable challenge, the copies of original declassified messages and texts provide significant proof that what the authors contend may, in fact, be alarmingly correct.

MAJ Richard D. Koethe III, *USAR, 3291st US Army Reserve School, Memphis, Tennessee*

FOR KING AND KAISER! The Making of the Prussian Army Officer, 1860–1914 by Steven E. Clemente. 280 pages. Greenwood Press, Inc., Westport, CT. 1992. $45.00.

Although the subjects are addressed in many classic German army histories, this book is the only one to concentrate solely on Prussian officer recruitment and education. It develops, in detail, the conflicting requirements of the maintenance of a noble officer corps and the increase in education required from 1860 to 1914. Unfortunately, the reader will find no new information and little analysis. Additionally, the lessons of the 19th-century Prussian army have extremely limited utility for the US officer corps in the 1990s.—**MAJ Peter J. Schifferle, *USA, USACGSC, Fort Leavenworth, Kansas***

WARRIORS' WORDS: A Quotation Book, From Sesostris III to Schwarzkopf, 187 BC to AD 1991, by Peter G. Tsouras. 534 pages. Arms and Armour Press, London. (Distributed by Sterling Publishing Co., Inc., New York.) 1992. $29.95.

Senior officers, scholars and teachers of military literature and those highly placed in public policy circles frequently are required or requested to give speeches or write articles that deal with the art and science of warfare. They are expected to be well schooled in the words of history's great battle captains. *Warriors' Words* will help. Spanning nearly 4,000 years, this book offers poignant remarks from Pharaoh Sesostris III, Hattusilis I and Amenhotep, to Colin Powell, Norman Schwarzkopf and Harry Summers—all easily retrievable by name, date, page and subject matter.—**LTC James E. Swartz, *USAR, Lytle Creek, California***

FORCE AND DIPLOMACY IN THE FUTURE by Stephen J. Cimbala. 242 pages. Praeger Publishers, New York. 1992. $47.95.

Stephen J. Cimbala writes extensively on military power as it relates to international policy, particularly the effects of the end of the Cold War on world politics, specifically the future functions of military force. He discusses the role of nuclear weaponry, particularly in Europe, and the use of coercive strategies in situations such as the recent Gulf War. This is a thoughtful analysis of the complex and confounding current world environment, with rich historical allusion and requisite stress on nationalism and economics as global security concerns. It is a welcome addition to the literature which treats its haunting premise that the stability of a bipolar world may well have disappeared along with its dangers.—**LTC David L. Watkins, *USAR, Louisville, Ohio***

TO THE GATES OF RICHMOND: The Peninsula Campaign by Stephen W. Sears. 468 pages. Ticknor & Fields, New York. 1992. $24.95.

Stephen W. Sears uses the same award-winning style found in his earlier *Landscape Turned Red* to cover an entire campaign. His latest effort will further enhance his reputation as one of the leading US scholars on General George B. McClellan. The campaign on the Virginia Peninsula in 1862 was one of the largest of the Civil War and saw joint use of both sides' armies and navies. This test of arms would make or break many of the individuals involved. Perhaps the best example of this phenomenon is that experienced by the Army of Northern Virginia and its command structure, headed by General Robert E. Lee.

In this exceptionally fair and even-handed appraisal of the campaign, Sears clearly discusses all aspects of the decisions and events of the campaign's crucible. This is a rich campaign history, often told in the words of its soldiers and leaders. These accounts, many from new primary sources, give a unique perspective to the ebb and flow of events unmatched in any other account.

The book has two sections of period photographs that support the text, as well as numerous maps of the various battlefields. The placement of the maps is the only fault I find with this superb book. They are almost always a page or two after the author's detailed explanation of the troop dispositions. Putting the maps before, or with, the descriptions would assist the reader's understanding of the complexities found on the various fields of battle. However, this is not a significant flaw, and overall, *To the Gates of Richmond* is an exceptional book well worth the price and of value to any Civil War library.

LTC Gary D. Rhay, *USA*, *Headquarters Commandant, I Corps, Fort Lewis, Washington.*

THE LAST CITADEL: Petersburg, Virginia, June 1864–April 1865 by Noah Andre Trudeau. 514 pages. Little, Brown & Co., Boston, MA. 1991. $22.95.

"It was endurance without relief; sleeplessness without exhilaration; inactivity without rest; constant apprehension requiring ceaseless watching. . . . Not the least of the evils encountered was the unavoidable stench from the latrines." No, not a tour in the Pentagon, but a soldier's view of life in the trenches outside Petersburg.

The Last Citadel, the sequel to Noah Andre Trudeau's award-winning *Bloody Roads South: The Wilderness to Cold Harbor, May–June 1864*, ends this war series, which is in the finest tradition of Civil War narratives. Trudeau has taken the longest siege on North American soil and developed a surprisingly quick-paced, exciting story. With his extensive use of primary sources, detailed maps and balanced event-by-event narration, Trudeau has produced something rare—a new view of the most written about war in history.

Following the second battle of Cold Harbor, 1 to 3 June 1864, it became painfully obvious that prepared defenses could not be taken by direct assault. General Ulysses S. Grant ordered that no attacks be made upon entrenched positions, and he moved his army past Richmond to take Petersburg. However, the Union maneuver fell short of the Cockade City, in part because " 'The Army of the Potomac . . . was a blunt tool when it reached Petersburg,' one field officer claimed. 'The Wilderness, Spottsylvania, and especially Cold Harbor, had killed out the men who, in a charge, run ahead; and the remainder were discouraged by incessant fighting and toil, and by want of success . . . .' "

The 10-month siege that followed is remembered most for the infamous Battle of the Crater on 31 July. Making less of an impact was the evolution in tactics, weapons and engineering that would still be a part of trench warfare 50 years later—ready to be learned all over again.

The Confederates had only one chance for victory at Petersburg and that was in the 1864 election. The lack of a Union victory in the most visible theater of the war sparked the Democratic party to nominate General George B. McClellan to run on an antiwar platform. When President Abraham Lincoln was re-elected, the ultimate fate of Petersburg, Richmond and the Confederacy was sealed.

This definitive account of the Petersburg Campaign is well worth reading. The 20 original field sketches, 56 pages of notes and sources and 21 original maps make this a book worthy of inclusion in your military history library.

MAJ William R. Grewe, *USA*, *Office of the J–1, Joint Staff, Washington, D.C.*

INSIDE THE VC AND THE NVA: The Real Story of North Vietnam's Armed Forces by Michael Lee Lanning and Dan Cragg. Fawcett Book Group, New York. 1992. $20.00.

Most military historians would agree that Vietcong (VC) and North Vietnamese Army (NVA) soldiers could be considered among the best light infantry in the history of warfare; most US combat soldiers who fought in Vietnam would certainly agree with this characterization. Our forces spent over 20 years fighting these superb soldiers, and there is a

myriad of literature about our involvement in the Vietnam War. Yet, with the exception of Douglas Pike, who dealt very skillfully with the political side of the communist forces in *PAVN: People's Army of Vietnam*, very little light has been shed on the communist foot soldier, his training, motivation and day-to-day life. Michael Lee Lanning and Dan Cragg go a long way in *Inside the VC and NVA* toward redressing this oversight in the Vietnam War historiography.

Drawing on over six years' combat experience in Vietnam and a combined 42 years of service in the US Army, the authors produce a "grunt's eye-view" of their old adversary. They base their findings on a multitude of interviews conducted by the Rand Corporation with VC and NVA prisoners of war and defectors and on observations collected from US commanders and fighting men about the VC and NVA.

The authors produce a picture of the communist soldier as a well-disciplined, thoroughly trained and highly motivated soldier. They explore in detail the military system that produced such effective fighters, beginning with how these soldiers were recruited and trained. Perhaps most interesting is the description of how new NVA recruits from the north were infiltrated south to fight.

Lanning and Cragg also address unit organization, equipment, arms, supplies, logistical arrangements and life inside a communist camp in the field. Having established how the soldier is recruited, trained and brought to the battlefield, they examine the VC and NVA in battle, to include strategy, tactics, planning, leadership and conduct of operations. The authors skillfully relate how the communists were successful in battle by fighting only when conditions were most favorable and when they could pick the time and place. Therein lay their ability to create "an air of invincibility in the eyes of their enemies, the local populace, and themselves."

In the "Afterword," the authors admit, almost reluctantly, a grudging respect for their previous foes and state that they felt "more kinship with the soldiers of the VC [and] NVA than we did with many of our fellow Americans, those who had protested the war on campus and in the streets . . . ." Lanning and Cragg see as the ultimate irony that, given the current situation in Vietnam, these superb soldiers won the war but lost the peace.

The authors make the individual VC and NVA soldiers much easier to understand. While most American readers cannot abide the communist system for which the VC and NVA forces fought or some of the atrocities that occurred during the war, they can certainly appreciate, after reading *Inside the VC and NVA*, that these soldiers, for the most part, were very much like good soldiers everywhere, who did their duty as they saw it, often performing courageously against superior odds. Even one who has fought against the VC and NVA in pitched battle must acknowledge their devotion to duty and ability to endure extreme hardships while continuing to fight for what they believed.

Lanning and Cragg's excellent study provides a detailed portrait of the VC and NVA soldiers and why they fought the way they did; this effort has removed much of the mystery surrounding a foe that our nation fought for over 20 years.

LTC James H. Willbanks, *USA, Retired,*
Leavenworth, Kansas

LOW-APTITUDE MEN IN THE MILITARY: Who Profits, Who Pays? by Janice H. Laurence and Peter F. Ramsberger. 185 pages. Greenwood Press, Inc., Westport, CT. 1991. $42.95.

Is the military a great place to start for everyone, including those with a limited aptitude of meeting the demands of a modern army? Should men with marginal cognitive abilities receive a chance to overcome their low aptitude to serve their country? To what end does the government's benefit accrue? And at what cost?

In other words, should we, as some social activists have often called for, allow our nation's military to play a role as an agent of change for our government's social welfare programs? The answers to these difficult questions, as well as a substantive basis for their formulation, are provided in this highly informative and readable account by two senior scientists with the Human Resources and Research Organization.

Although recent trends (*Army Times*, 25 May 1992 and 9 November 1992) suggest that fewer recruits are of the lower aptitude, this has not always been the case. According to Janice H. Laurence and Peter F. Ramsberger, two events—Project 100,000 and the Armed Services Vocational Aptitude Battery (ASVAB) Misnorming—created the opportunity to study the contention that low-aptitude men brought into the military would leave with increased aptitude for success in the civilian sector.

Project 100,000 refers to a program that began in 1966. The previously closed recruitment door was now opened to those with lower aptitude scores and to "a relatively few of those with readily remedial physical problems." This book provides a detailed and helpful discussion of the motivation for, history of and rationale behind Project 100,000, offering a

context for the program often not addressed by those critical of its results.

The ASVAB Misnorming represents an unintended error with a statistical comparison procedure involving the ASVAB. The statistical anomaly began in January 1976 and ended 30 September 1980. It resulted in more low-aptitude recruits (the now infamous Category [CAT] IVs) being allowed into the services than had occurred during the six years and two months of Project 100,000. The factual and speculative accounts of how the misnorming occurred and was detected offers an intriguing view into the military manpower and policy arena.

The book also offers evidence that neither the services nor the low-aptitude men benefited from these expensive programs. This book offers compelling evidence that efforts, although well-intended, to use the services as social welfare agents of change were misguided efforts of convenience. If nothing else, this book serves to substantiate notions and experiences that something was wrong with the recruitment system. However, some things do change for the better. The latest figures for the Army project that fewer than 1 percent of the 1992 recruits fall into CAT IV of cognitive ability. This excellent book will help you appreciate these new projections.

MAJ Thomas J. Williams, *USA, St. Louis University, St. Louis, Missouri*

THE STRATEGIC REVOLUTION: Thoughts for the Twenty-First Century by Neville Brown. 248 pages. Brassey's (UK), London. 1992. $37.00.

Strategic studies scholar Neville Brown presents a sweeping overview of trends in military technology, prospects for peace in the emerging new world order and strategies for the West. Brown regards the advanced technology demonstrated in Operation *Desert Storm* as evidence that the rapid growth of the past 10 years is leveling off. He expects improved electronics and weapons to severely limit manned aircraft effectiveness. He attaches particular significance to terminally guided munitions, launched from remote platforms or tubes, to compensate for increasing lethality over the battlefield. This trend bears watching for its impact on close air support. Brown's response to demands for an ever-increasing peace dividend is to reduce Active forces while maintaining Reserve strength to broaden public support pending "a rediscovery of honor" instead of the anti-institutionalism that followed the end of the Cold War.

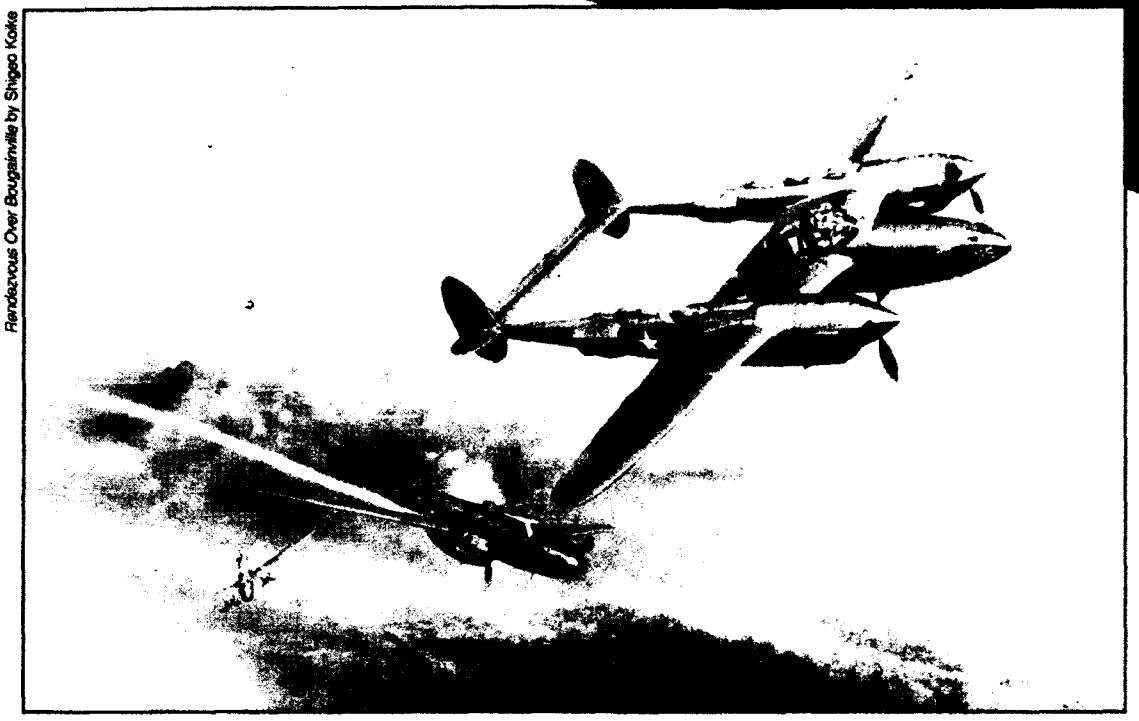
Ethnic communalism emerges as the most serious threat to political and economic stability. After rejecting the notion of "shatterbelts," the author homes in on the Balkans, Crimea, Afghanistan, Israel's West Bank, the Koreas and Kashmir (as the Kurdish homeland) as flash points. His assumption, that the only means of pacifying these areas is promoting greater planetary consciousness, seems naively optimistic. Brown suggests countering centrifugal forces acting on the former Soviet Union by channeling all aid to the former republics through Russia and tying it to preservation of the new Commonwealth of Independent States.

Trends already evident in global warming will alter weather patterns, particularly in a belt stretching across Western Europe and the Eurasian heartland. One likely result will be increased rainfall and a more moderate climate in Northern Europe, while the Mediterranean littoral and Crimean watersheds lose rainfall. This change could alter existing political, economic and agricultural patterns over a large area. Brown expects similar destabilizing results from pressures on the environment. While attrition will reduce the use of wood as a fuel, efforts to curtail coal consumption are likely to be resisted by the Chinese and Eastern Europeans. The ambiguous US support for family planning and German resistance to immigration are indicative of the difficulties in attempting to alleviate those population pressures that pose a long-term threat to peace.

Political and economic integration of Europe may prove more difficult than it now appears. Brown foresees problems in creating a common currency or consistent political strategy given the disparities in economic development and avowed neutrality (of the Swiss and Austrians). He also speculates that membership on the United Nations Security Council will change to reflect new realities. A single Western European Union representative might replace France and Britain, and the Japanese can be expected to seek a seat. Such a security council might look increasingly to the United States to carry out its mandates. It is not at all clear that the United States is either willing or able to assume the leadership role it took in the Gulf War on a continuing basis.

Brown's perspective is broad, and his speculations are certain to stimulate thought and debate about the approaching millennium. The book suggests a less stable new order; one balancing powerful destabilizing political, economic, climatic and environmental forces. While his predictions are highly possible, if not likely, the author's solutions call for more idealism than history tells us to expect. All in all, this is an eminently readable rendition of possible futures and threats.

COL John W. Messer, *USAR, Retired, Ludington, Michigan*



Rendezvous Over Bougainville by Shigeo Koike

BOUNCING YAMAMOTO's BETTY

Admiral Isoroku Yamamoto, commander in chief of the Japanese Combined Fleet, was killed when his plane was shot down just before landing at Kahili airfield on the southern tip of Bougainville. A squadron of P–38 *Lightnings* were hastily equipped with drop–tanks to give them the extra range required to attempt the ambush flight.

The cipher code used in the message traffic detailing Yamamoto's inspection of Japanese forces in the Eighth Area Army had been intercepted and broken by American cryptographers at Pearl Harbor. Admiral Chester Nimitz decided to "try to get him." The squadron of 16 P–38s from Guadalcanal flew 550 miles from their base; intercepted and destroyed Yamamoto's plane, as well as a second Betty bomber and three Zero fighter planes. Only one P–38 was lost.

The loss of Yamamoto was a shock to the Japanese people and is said to have demoralized everyone. For Americans, Yamamoto's death was a small measure of revenge, as Yamamoto had ordered the attack of Pearl Harbor on 7 December 1941.